# THE HEALTH OF BOSTON 2004 DATA TABLES



Prepared by the Boston Public Health Commission David Mulligan, Chair

John Auerbach, Executive Director

**JUNE 2004** 

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#### PREFACE

In 1995, the Legislature passed, and the Governor signed, legislation establishing the Boston Public Health Commission and requiring it to submit annual reports on various matters related to public health in the city of Boston:

Sect. 8. (b) ... the commission shall prepare and file with the mayor, the president of the city council and the city clerk an annual assessment of the public health needs of the city. The annual public health assessment shall include an evaluation of existing local, state and federal programs and services to address the public health needs of the city and the adequacy of funding sources available for such programs and services, an assessment of programs, services and other activities provided by private public health providers to address the public health needs of the city, including identification of all vulnerable populations in the city, the performance of providers under contract with the commission in accordance with this act, and proposals by the commission to enlarge or enhance its response to the public health needs of the city including new, expanded or revised programs or services to be provided by the commission or by public health providers under contract with it for the ensuing fiscal year.

The Health of Boston 2004 Data Tables is the eighth in a series of annual reports in response to this legislation.

#### ACKNOWLEDGMENTS

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## INTRODUCTION

Welcome to **The Health of Boston 2004 Data Tables**. This version of our annual report has been prepared for readers who want an extensive yet readily usable source of Boston health data and who are comfortable reading and interpreting tables of numbers. We hope that readers will find the report useful for grant proposal preparation, community program development, monitoring of health trends, academic projects, and similar purposes. Additional neighborhood-level data has been included in response to user feedback about previous reports. Both counts and calculated measures such as rates and percentages are shown to make the data tables as useful and flexible as possible.

The report is organized into two sections. The first section contains citywide data, many of which are presented by race/ethnicity, age, and sex. Data over time are shown wherever possible. The second section contains tables for each Boston neighborhood. Because of the confidentiality and statistical limitations imposed by small numbers, most of the neighborhood-level measures cannot be further divided into race/ethnicity, age, or sex subgroups. Nevertheless, these tables offer a very full picture of the health status of Boston residents, and they readily allow comparisons across neighborhoods.

Statistical analysis of the data (for example, to determine the statistical significance of differences between two or more rates) is not included in the tables, but help with data interpretation is provided through the definitions and examples shown for each health measure.

Additional information about the rate calculations, data quality, and related issues pertaining to the data tables can be found in the Technical Notes section at the end of the report.

For readers who prefer to see data in graphical form, a companion document entitled **The Health of Boston 2004 Chart-book** is forthcoming. The chartbook will show data from the current report in pie, bar, and line graphs, with explanatory text to help readers with data interpretation and notes of special interest.

We always welcome comments from readers, and all Boston Public Health Commission reports can be found online at <a href="https://www.bphc.org">www.bphc.org</a>. Our phone number is (617) 534-4757.

**CITYWIDE BOSTON DATA** 

## **DEMOGRAPHICS**

Population by Race/Ethnicity, Boston, 2000						
	Number	Percent				
Asian	44,009	8%				
Black	140,305	24%				
Latino	85,089	14%				
White	291,561	50%				
Other	10,003	2%				
Two or More	18,174	3%				
TOTAL	589,141	100%				

#### Notes

Persons who consider themselves Latino or Hispanic are counted in that group regardless of their race (Asian, Black, White, etc.). "Other" includes Native Hawaiians/Other Pacific Islanders, Alaska Native/American Indians, and Other Race.

#### **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

## **CITYWIDE BOSTON DATA**

#### **DEMOGRAPHICS**

	Selected Ancestry Groups of	of Boston Residents, 2000
	Number	
Asian	44,345	Latino
Chinese, except Taiwanese	19,420	Puerto Rican
Vietnamese	11,126	Dominican
Asian Indian	4,051	Salvadoran
Korean	2,423	Colombian
Japanese	2,235	Mexican
Filipino	1,741	Guatemalan

	Number
Latino	85,199
Puerto Rican	26,960
Dominican	14,629
Salvadoran	5,890
Colombian	4,653
Mexican	4,053
Guatemalan	2,779
Honduran	2,148
Cuban	1,839
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	Number
Subsaharan African	21,170
Cape Verdean	11,060
"African"	5,962
Nigerian	1,702

	Number
West Indian	37,287
Haitian	18,979
Jamaican	8,226
Trinidadian and Tobagonian	3,309
West Indian	3,101
Barbadian	2,165

#### **Definition**

Ancestry: The national origins of oneself or one's family

#### Example

Among the 44,345 Asian Boston residents as of the 2000 Census, 11,126 were of Vietnamese ancestry.

#### Notes

These tables show only selected large subgroups of the Boston population. They do not include European Americans, who make up about half of the city's population, or African Americans who specify their origins as other than Subsaharan African or West Indian.

Overall counts do not equal the sum of the subgroup counts because only subgroups with at least 1,000 members are shown.

#### **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

## **CITYWIDE BOSTON DATA**

## **DEMOGRAPHICS**

## Average Household Size by Race/Ethnicity, Boston, 2000

	Number of People
BOSTON	2.3
Asian	2.5
Black	2.7
Latino	3.1
White	2.0

#### **Definition**

Average: The sum of the number of people in a race/ethnicity group divided by the sum of the number of households in the same group.

#### Example

An average of 2.5 people resided in Boston households in which the head of the household identified himself or herself as Asian.

#### **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

## **DEMOGRAPHICS**

## Uninsured Population, Boston, 2000 and 2002

	2000	2002
BOSTON	8.0%	11.7%
Male	9.9%	14.3%
Female	7.2%	10.4%
Ages 0-18	6.3%	4.2%
Ages 19-24	11.3%	28.1%
Ages 25-44	9.7%	13.1%
Ages 45-64	10.1%	8.9%
Asian		
Black	8.2%	9.2%
Latino	12.8%	24.8%
White	4.9%	6.5%

#### Definition

All information is self-reported. Asian, Black, and White race/ethnicity groups do not include Latinos/Hispanics.

## Example

In 2000, 8.0% of Boston residents did not have health insurance.

#### Note

The sample size for Asians was too small to permit reporting.

#### **Data Source**

Health Insurance Status of Massachusetts Residents Survey, Division of Health Care Finance and Policy

#### **DEMOGRAPHICS**

#### Introduction

Homeless people are vulnerable to malnutrition, poor sanitation, overcrowding in shelters, exposure to the extremes of weather, habitual use of alcohol and drugs, and lack of privacy. The struggle to survive on the streets often leads to the neglect of health needs. The city conducts an annual street census of homeless individuals.

## Homeless Count by Year, Boston 1992-2003

Year	Number
1992	4,411
1993	4,809
1994	5,299
1995	4,774
1996	4,948
1997	5,016
1998	5,272
1999	5,682
2000	5,906
2001	6,001
2002	6,210
2003	6,241

#### Definition

Boston residents are considered for the purpose of this census to be homeless if they live on the streets or in a shelter.

#### Example

In 2003, there were 6,241 homeless people counted in the annual census.

#### Note

For 1996 only, the count included homeless hospital inpatients.

#### **Data Source**

Homeless Counts, City of Boston Emergency Shelter Commission

## **CITYWIDE BOSTON DATA**

## **CHILDBEARING**

Number of Births by Year, Boston, 1992-2002											
1992 1993 1994 1995 1996 1997 1998 1999 2000								2001	2002		
BOSTON	9,273	8,808	8,450	8,034	7,717	7,822	7,883	8,017	8,079	8,231	8,005

## Note

The number of births in 2002 has been updated from a preliminary figure of 8,011.

## **Data Source**

## **CHILDBEARING**

	Numb	er and Rat	te of Births	to 15-17 Y	ear-olds b	y Race/Eth	nicity and	Year, Bost	on, 1992-20	002	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BOSTON	421	381	390	373	320	331	319	269	279	237	241
	50.5	45.6	46.6	44.5	38.1	39.4	37.9	31.9	31.5	26.7	27.1
Asian	11	7	5	13	10	8	7	5	10	5	n<5
	19.9	12.3	8.5	21.3	15.9	12.3	10.5	7.3	14.1	6.9	n<5
Black	243	212	200	194	155	164	150	126	121	109	97
	73.9	64.4	60.7	58.8	46.9	49.5	45.2	37.9	36.4	32.7	29.1
Latino	104	103	130	119	114	122	101	90	110	77	102
	67.7	65.0	79.5	70.6	65.7	68.3	55.0	47.7	56.8	38.8	50.1
White	45	49	52	43	35	24	32	37	26	24	26
	15.6	17.6	19.2	16.4	13.8	9.8	13.5	16.2	11.8	11.3	12.8

## **Definition**

The rate is defined as the number of live births to 15-17 year-old Boston females per 1,000 Boston females the same age.

## **Data Source**

## **CHILDBEARING**

	Multiple Births by Year, Boston and Massachusetts, 1992-2002										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BOSTON											
Number	258	212	263	243	247	291	275	273	292	331	320
BOSTON											
Percent	2.8%	2.4%	3.1%	3.0%	3.2%	3.7%	3.5%	3.4%	3.6%	4.0%	4.0%
MA											
Number	2,480	2,572	2,571	2,627	2,815	3,118	3,402	3,393	3,507	3,605	3,951
MA											
Percent	2.8%	3.0%	3.1%	3.2%	3.5%	3.9%	4.2%	4.2%	4.3%	4.4%	4.9%

## **Definition**

Percent: The yearly percentage of all live births that were multiples, including twins, triplets, and higher-order births.

## **Data Source**

Boston resident live births, Massachusetts Department of Public Health

	Preterm Births by Maternal Birthplace, Boston, 2002												
		Dominican	EI				Puerto	U.S.	U.S.	U.S.	U.S.	U.S.	
	China	Republic	Salvador	Haiti	Jamaica	Other	Rico	Asian	Black	Latino	Other	White	Vietnam
Number	8	47	21	46	14	145	28	5	214	56	12	190	15
Percent	5.0%	10.1%	7.9%	10.8%	10.8%	8.0%	12.8%	10.2%	15.0%	11.1%	13.8%	8.7%	6.4%

## **Definition**

Preterm births are defined as births occurring before 37 completed weeks of gestation.

## **Data Source**

## **CHILDBEARING**

		Numbe	ers of Low B	Birthweight B	Rirths by Ra	ce/Ethnicity	, and Year	Roston 199	2-2002		
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Asian	38	23	32	41	34	49	38	32	45	32	50
Black	438	412	395	338	346	308	312	323	327	304	330
Latino	123	135	134	120	133	135	143	120	139	135	152
White	191	189	170	178	154	188	178	176	188	206	202
BOSTON	807	775	745	695	681	719	692	679	726	703	761

## Note

Low birthweight defined as weighing less than 2,500 grams, or 5.5 pounds, at birth.

#### **Data Source**

Boston resident live births, Massachusetts Department of Public Health

	Rates of Low Birthweight Births by Race/Ethnicity and Year, Boston, 1992-2002										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Asian	6.1%	4.1%	5.6%	7.1%	6.2%	7.7%	7.5%	5.5%	6.7%	5.4%	7.8%
Black	13.0%	12.6%	13.0%	11.9%	13.2%	12.3%	12.5%	12.4%	13.1%	12.1%	13.7%
Latino	7.1%	8.0%	7.8%	7.3%	8.7%	8.1%	8.1%	7.0%	7.9%	7.6%	8.3%
White	5.9%	6.2%	5.8%	6.5%	5.8%	7.2%	6.4%	6.2%	6.7%	7.0%	7.2%
BOSTON	8.8%	8.9%	8.9%	8.7%	9.0%	9.2%	8.8%	8.5%	9.0%	8.6%	9.5%

#### Note

Rates presented as percentage of births by race/ethnicity that are low birthweight (weigh less than 2,500 grams, or 5.5 pounds, at birth).

#### **Data Source**

## **CHILDBEARING**

	Number of Infant Deaths and Infant Mortality Rate by Race/Ethnicity and Year, Boston, 1992-2002										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BOSTON	95	86	77	54	54	66	54	59	54	61	56
	10.3	9.8	9.2	6.8	7.0	8.4	6.3	7.4	6.7	7.4	7.0
Black	64	49	38	34	26	32	34	35	34	34	30
	19.0	15.0	12.5	11.9	9.9	12.8	11.2	13.5	13.6	13.5	12.4
Latino	8	15	14	5	8	6	8	7	9	10	12
	4.6	8.9	8.2	3.0	5.2	3.6	4.5	4.1	5.1	5.6	6.5
White	19	18	21	13	18	25	11	16	8	15	13
	5.9	5.9	7.2	4.7	6.7	9.5	4.0	5.6	2.8	5.1	4.6

## **Definition**

The infant mortality rate is the number of deaths among infants less than one year of age per 1,000 live births.

## **Data Source**

Boston resident live births and infant deaths, Massachusetts Department of Public Health

Number of Infant Deaths and Infant Mortality Rate by Maternal Age, 2000-2001							
Age Group	Number of Deaths, 2001	Rate in 2000	Number of Deaths, 2001	Rate in 2001			
Ages < 20	5	6.2	n<5	n<5			
Ages 20-24	10	6.5	12	7.7			
Ages 25-29	18	9.0	8	4.0			
Ages 30-34	12	5.3	13	5.4			
Ages 35+	7	4.8	14	9.1			

#### **Definition**

The infant mortality rate is the number of deaths among infants less than one year of age per 1,000 live births.

#### **Data Source**

Boston resident live births and infant deaths, Massachusetts Department of Public Health

## **CITYWIDE BOSTON DATA**

## **HOSPITALIZATION**

#### Hospitalizations by Year, Boston, 1994-2002

Year	Number
1994	90,472
1995	84,579
1996	78,659
1997	72,961
1998	72,498
1999	68,072
2000	73,983
2001	75,820
2002	75,348

#### **Definition**

Number of hospitalizations: These do not indicate the number of persons hospitalized annually, but the number of hospitalizations.

#### Example

The annual number of hospitalizations of Boston residents fell between 1994 and 1999, then increased between 1999 and 2002.

#### **Data Sources**

1994-1996 Acute Care Hospital Discharges, Massachusetts Health Data Consortium, Inc.

## **CITYWIDE BOSTON DATA**

## **HOSPITALIZATION**

## Hospitalizations: Age-Adjusted Rates by Sex, Boston, 2002

	Number of Hospitalizations	Hospitalizations per 1,000 Population
BOSTON	75,348	139.5
Male	31,271	135.0
Female	44,077	145.5

#### **Definitions**

Age-adjusted rates (AAR): AARs are calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

Hospitalizations per 1,000 population: The number of hospitalizations per 1,000 population of the specified group.

#### Example

Among male Boston residents, there were 31,271 hospitalizations in 2002. The age-adjusted rate for males was 135.0 hospitalizations per 1,000 male Boston residents.

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **HOSPITALIZATION**

## Hospitalizations: Age-Adjusted Rates by Race/Ethnicity, Boston, 2002

BOSTON	Number of Hospitalizations	Hospitalizations per 1,000 Population 139.5
Asian (may include Latinos)	2,808	71.9
Black (may include Latinos)	21,388	163.0
Latino	9,015	130.2
White (may include Latinos)	33,602	107.5

#### **Notes**

Racial/ethnic information in the hospital discharge data should be interpreted with caution because it is not collected consistently by Massachusetts hospitals. Latinos may be found in any of the above categories, depending on the individual hospital's reporting practices. These rates are age-adjusted to the 2000 US standard population.

#### **Data Source**

#### **HOSPITALIZATION**

#### Hospitalizations: Age-Specific Rates, Boston, 2002

	Number of Hospitalizations	Hospitalizations per 1,000 Population
BOSTON*	64,058	110.0
Ages 1-9	1,880	32.0
Ages 10-17	1,982	39.0
Ages 18-24	4,854	50.8
Ages 25-44	18,504	87.6
Ages 45-64	16,269	155.6
Ages 65 and Over	22,449	366.0

#### Definition

Age-specific rates (ASR): An ASR is calculated by dividing the number of events among people in an age group by the number of people in that age group. ASRs for hospitalizations are usually calculated on the basis of every 1,000 people.

#### Example

Among Boston residents 1 to 9 years of age, there were 1,880 hospitalizations in 2002. The age-specific rate for this age group was 32.0 hospitalizations per 1,000 Boston residents 1 to 9 years of age.

#### Note

\*The figures for Boston overall do not include the hospitalizations of infants under one year of age.

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **HOSPITALIZATION**

## Leading Causes of Hospitalization, Age-Adjusted Rates, Boston, 2002

	Number of Hospitalizations	Hospitalizations per 1,000 Population
Pregnancy	9,098	23.1
Psychoses	2,886	5.0
Injury	2,373	4.3
Substance Abuse	2,119	3.6
Chest Pain	1,714	3.5
Heart Failure & Shock	1,527	3.1
Bronchitis & Asthma	1,496	2.9
Gastroenteritis	1,449	2.8
Simple Pneumonia & Pleurisy	1,418	2.8
Nutritional and Metabolic		
Disorders	1,253	2.5

## Example

Pregnancy and pregnancy-related conditions, the majority of which were labor and delivery, were the leading reasons for hospitalization in 2002.

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **HOSPITALIZATION**

## Leading Causes of Hospitalization, Age-Adjusted Rates, Boston Males, 2002

	Number of Hospitalizations	Hospitalizations per 1,000 Population
Substance Abuse	1,506	5.4
Injury	1,375	5.3
Psychoses	1,368	5.0
Chest Pain	774	3.5
Simple Pneumonia & Pleurisy	673	3.3
Heart Failure and Shock	636	3.3
Bronchitis and Asthma	672	2.7
Gastroenteritis	598	2.6
Nutritional & Metabolic Disorders	528	2.5
Cellulitis	571	2.3

## Example

Substance abuse was the leading reason for the hospitalization of Boston males in 2002.

#### **Data Source**

## **HOSPITALIZATION**

## Leading Causes of Hospitalization, Age-Adjusted Rates, Boston Females, 2002

	Number of Hospitalizations	Hospitalizations per 1,000 Population
Pregnancy	9,098	23.1
Psychoses	1,518	5.0
Injury	998	3.4
Chest Pain	940	3.4
Uterine Procedures	920	3.3
Bronchitis & Asthma	824	3.1
Gastroenteritis	851	3.0
Heart Failure and Shock	891	2.9
Simple Pneumonia & Pleurisy	745	2.6
Nutritional & Metabolic Disorders	725	2.5

#### Example

Pregnancy and pregnancy-related conditions, the majority of which were labor and delivery, were the leading reason for the hospitalization of Boston females in 2002.

#### Note

Most pregnancy-related hospitalizations are for labor and delivery.

#### **Data Source**

## **HOSPITALIZATION**

## Number of Hospitalizations by Payer Type and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Medicare	24,616	25,071	24,268	25,191	25,934	25,636
Medicaid	13,836	13,772	13,563	15,362	15,319	15,078
Other Government	754	608	404	374	410	417
Private	25,214	26,117	24,120	26,852	26,881	27,825
Self Pay or Free Care	8,260	6,347	5,395	5,849	5,925	6,043
Worker's Compensation	279	328	301	280	290	304
TOTAL	72,959	72,243	68,051	73,908	74,759	75,303

#### Example

In 1997, Medicare covered 24,616 hospitalizations of Boston residents.

## **Data Source**

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

## Percentage of Hospitalizations by Payer Type and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Medicare	33.7%	34.7%	35.7%	34.1%	34.7%	34.0%
Medicaid	19.0%	19.1%	19.9%	20.8%	20.5%	20.0%
Other Government	1.0%	0.8%	0.6%	0.5%	0.5%	0.6%
Private	34.6%	36.2%	35.4%	36.3%	36.0%	37.0%
Self Pay or Free Care	11.3%	8.8%	7.9%	7.9%	7.9%	8.0%
Worker's Compensation	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

## Example

One-third (33.7%) of hospitalizations of Boston residents in 1997 were paid for by Medicare.

#### **Data Source**

#### **CITYWIDE BOSTON DATA**

#### **EMERGENCY DEPARTMENT VISITS**

#### Introduction

Hospital emergency department visits may be for urgent, life-threatening injuries and illnesses or for preventive and routine health care. According to the most recent data available from the US Centers for Disease Control and Prevention, during 2001 about 107 million visits were made to hospital emergency departments in the US. Leading reasons included abdominal pain, chest pain, fever, headache, injury, and acute respiratory infection. Emergency department utilization was higher for Black than for White patients. Among all patients, private insurance was used to pay charges for 40.2% of all emergency department visits, Medicaid/State Children's Health Insurance Program for 17.5%, Medicare, 14.8%, and self-pay (not including copayments and deductibles), 14.7%.

#### Emergency Department Visits by Age and Sex, Boston, 2002

Age Group	Number of Visits		Percentag	ge of All Visits
	Male	Female	Male	Female
0-9	17,560	14,578	7.3%	6.1%
10-17	8,840	9,352	3.7%	3.9%
18-24	16,904	21,926	7.0%	9.1%
25-44	45,333	43,909	18.8%	18.2%
45-64	23,121	20,703	9.6%	8.6%
65 and Over	7,377	11,325	3.1%	4.7%
TOTAL	119,135	121,793	49.4%	50.6%

#### **Example**

In 2002, there were 17,560 emergency department visits by Boston boys under the age of ten. This represented 7.3% of all emergency department visits during that year.

#### **Data Source**

#### **EMERGENCY DEPARTMENT VISITS**

## **Emergency Department Visits by Race/Ethnicity, Boston, 2002**

	Number of Visits	ED Visits per 1,000 Population
Asian (may include Latinos)	6,125	141.5
Black (may include Latinos)	87,728	586.8
Latino	37,446	440.1
White (may include Latinos)	81,834	255.0
TOTAL	213,133	355.9

#### Example

There were 6,125 emergency department visits by Asian residents of Boston in 2002. These visits occurred at a rate of 141.5 emergency department visits for Asians during that year.

#### Note

Some visit records did not note the race/ethnicity of the patient. The total does not include 9,727 visits by other/unknown ethnicities. Overall, racial/ethnic information in the emergency department data should be interpreted with caution because such information is not collected consistently by Massachusetts hospitals. Latinos may be found in any of the above categories, depending on the individual hospital's reporting practices.

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **EMERGENCY DEPARTMENT VISITS**

## **Emergency Department Visits by Day of Week, Boston, 2002**

	Number of Visits	Percentage of All Visits
Monday	37,685	15.6%
Tuesday	34,767	14.4%
Wednesday	33,635	14.0%
Thursday	32,528	13.5%
Friday	32,728	13.6%
Saturday	34,298	14.2%
Sunday	35,293	14.6%
TOTAL	240,934	100.0%

## Example

Of the 240,934 emergency department visits in 2002, 37,685 (15.6%) occurred on Mondays.

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **EMERGENCY DEPARTMENT VISITS**

## **Emergency Department Visits by Payer Type, Boston, 2002**

	Number of Visits	Percentage of All Visits
Private Insurance	104,771	43.5%
Self Pay or Free Care	50,457	20.9%
Medicaid	51,294	21.3%
Medicare	26,182	10.9%
Other Government	1,281	0.5%
Worker's Compensation	6,445	2.7%
Other	478	0.2%
TOTAL	240,908	100.0%

## Example

Private insurance covered 104,771 emergency department visits in 2002, 43.5% of the total.

#### **Data Source**

## **EMERGENCY DEPARTMENT VISITS**

## Leading Causes of Emergency Department Visits, Boston, 2002

	Number of Visits	Percentage of All Visits
Injury	70,538	29.3%
Respiratory Diseases and Disorders	27,612	11.5%
Miscellaneous Diseases and Disorders	22,918	9.5%
Digestive System Diseases and Disorders	13,738	5.7%
Mental Diseases and Disorders	12,248	5.1%
Nervous System Diseases and Disorders	10,536	4.4%
Ear, Nose, Mouth, and Throat Diseases and Disorders	9,255	3.8%
Infectious Diseases	8,894	3.7%
Musculoskeletal System and Connective Tissue Disorders	8,698	3.6%
Skin and Subcutaneous Tissue Diseases and Disorders	8,253	3.4%
Kidney and Urinary Tract Diseases and Disorders	6,789	2.8%
Other Specified Conditions	41,449	17.2%
TOTAL	240,928	100.0%

## Example

Injuries accounted for 29.3% of all emergency department visits by Boston residents in 2002.

## **Data Source**

#### **CITYWIDE BOSTON DATA**

#### **ASTHMA**

#### Introduction

Asthma is a condition in which the tiny vessels bringing air to the lungs constrict and become inflamed. During asthma attacks, which may be triggered by factors such as allergens, exercise, and cold temperatures, breathing becomes difficult for the asthma sufferer. Inhaled and oral medications are used to manage asthma. Hospitalizations and emergency department visits for this condition are an indicator of the amount of asthma in a community, the severity of the condition in that population, and the adequacy of out-patient management of asthma. The American Lung Association reports that most asthma cases in the US are among children under the age of 18 and that Black children have the highest rates of asthma.

	Asthma	Hospitalizati	on Rates Amo	ng Children Uı	nder Age 5 by	Sex and Year, I	Boston 1994-20	02	
	1994	1995	1996	1997	1998	1999	2000	2001	2002
BOSTON									
Number	480	448	325	289	261	275	251	273	285
BOSTON									
Rate	11.6	11.5	8.5	7.9	7.2	8.1	7.8	8.5	8.9
Female									
Number	187	200	120	117	112	119	101	110	108
Female									
Rate	9.2	10.1	6.4	6.5	6.4	7.2	6.5	7.0	6.9
Male									
Number	293	248	205	172	149	156	150	163	177
Male									
Rate	13.9	11.9	10.5	9.1	8.1	8.9	9.1	9.9	10.8

#### **Definition**

The rates represent the number of asthma-related hospitalizations among children under age 5 per 1,000 population under age 5.

#### **Data Source**

 $1994\text{-}1996 \ A cute \ Care \ Hospital \ Discharges, \ Massachusetts \ Health \ Data \ Consortium, \ Inc.$ 

2.9

## **CITYWIDE BOSTON DATA**

White (may include Latinos)

## **ASTHMA**

Hospitalizations for Asthma Among Children Under Age 5 by Race/Ethnicity, Boston, 2002				
	Number of Hospitalizations	Hospitalizations per 1,000 Population		
BOSTON	285	8.9		
Asian (may include Latinos)	13	6.1		
Black (may include Latinos)	123	10.7		
Latino	86	11 0		

## Definition

The rates represent the number of asthma-related hospitalizations among children under age 5 per 1,000 population under age 5.

#### **Data Source**

2.6

## **CITYWIDE BOSTON DATA**

## **ASTHMA**

Hospitalizations for Asthma by Age Group, Boston, 2002				
Age Group	Number of Hospitalizations	Hospitalizations per 1,000 Population		
Ages 0-9	437	6.6		
Ages 10-17	148	2.9		
Ages 18-24	75	0.8		
Ages 25-44	292	1.4		
Ages 45-64	329	3.1		
Ages 65 and Over	228	3.7		

1509

## **Data Source**

TOTAL

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

A O	Nemakan af Vicita	Danagat of All Visite
Age Group	Number of Visits	Percent of All Visits
0-4	1,002	16.5%
5-17	1,190	19.6%
18-24	693	11.4%
25-44	1,982	32.6%
45-64	1,006	16.5%
65 and Over	208	3.4%
TOTAL	6,081	100.0%

## **Data Source**

## **CITYWIDE BOSTON DATA**

## **ASTHMA**

## **Emergency Department Visits for Asthma by Time of Day, Boston, 2002**

Registration Time	Number of Visits	Percent of All Visits	Daily Average Volume	Percent of Daily Average Volume
12:00 a.m3:59 a.m.	753	12.4%	2	12%
4:00 a.m7:59 a.m.	579	9.5%	2	10%
8:00 a.m11:59 a.m.	1,160	19.1%	3	19%
12:00 p.m3:59 p.m.	1,105	18.2%	3	18%
4:00 p.m7:59 p.m.	1,209	19.9%	3	20%
8:00 p.m11:59 p.m.	1,275	21.0%	3	21%
TOTAL	6,081	100.0%	16	100%

#### **Data Source**

#### CITYWIDE BOSTON DATA

#### **HEPATITIS**

#### Introduction

Three major types of this liver disease are hepatitis A, B, and C. Each is caused by a virus. Hepatitis A results in acute (short-term) infection. It is spread through ingestion of contaminated food or liquids. Hepatitis B infection can be either acute or chronic. It is spread through contact with the body fluids of a person with hepatitis B. Hepatitis C infection is usually chronic and, like hepatitis B, is spread through infected body fluids. Hepatitis C is the most commonly reported blood-borne infection in Boston. Vaccines are available to prevent hepatitis A and hepatitis B infection; however, there is no vaccine for hepatitis C.

Incidence of Reported Hepatitis by Year, Boston, 1998-2002												
	1998		1999		2000		2001		2002			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Hepatitis A	32	5.7	30	5.2	33	5.6	94	16.0	29	4.9		
Acute Hepatitis B	19	3.4	15	2.6	20	3.4	n<5	N/A	19	3.2		
Chronic Hepatitis B	320	56.7	311	51.3	382	61.4	541	92.2	459	77.9		
Hepatitis C	378	60.1	793	137.5	1,116	189.4	1,128	191.5	1,108	188.1		

#### Definition

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

#### Example

There were 459 new cases of chronic hepatitis B diagnosed and reported in 2002 for Boston residents. The rate was 77.9 new reported cases of chronic hepatitis B cases per 100,000 Boston residents.

#### **Data Source**

Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division

### **CITYWIDE BOSTON DATA**

### **HEPATITIS**

Incidence of Reported Hepatitis by Sex, Boston, 2002						
	Female		Ma	ale		
	Number	Rate	Number	Rate		
Hepatitis A	11	3.6	18	6.3		
Acute Hepatitis B	7	2.3	12	4.2		
Chronic Hepatitis B	183	59.9	276	97.3		
Hepatitis C	383	125.3	725	255.7		

### **Definition**

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

### **Data Source**

Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division

### **HEPATITIS**

Incidence of Reported Hepatitis C by Race/Ethnicity, Boston, 2002					
Number					
BOSTON	1,108	188.1			
Asian	23	51.9			
Black	259	184.6			
Latino	173	203.3			
White	253	86.8			

#### Definition

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

#### Notes

There were 400 reported cases of hepatitis C that were among people of other or unknown race/ethnicity.

#### **Data Source**

Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division

#### CITYWIDE BOSTON DATA

#### **HIV/AIDS**

#### Introduction

Human Immunodeficiency Virus (HIV) is the organism that causes AIDS. People become infected with HIV through sexual contact, contact with infected blood, at birth (when infection can be transmitted from mother to baby), or through breastfeeding. Over a period of years, most people who are infected with HIV eventually develop AIDS as the virus damages the immune system. According to the US Centers for Disease Control and Prevention, nationally in 2002, men accounted for 71% of all newly diagnosed cases of HIV/AIDS, people ages 25-34, 28% of cases, and Blacks, 54% of cases of HIV/AIDS. Male-to-male sexual contact (44%) and exposure through heterosexual contact (35%) accounted for the majority of newly diagnosed cases of HIV/AIDS.

	Incidence Rates of Reported AIDS by Year, 1992-2002										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BOSTON											
Number	586	535	436	401	318	242	293	210	203	160	179
BOSTON											
Rate	103.7	95.8	77.7	71.3	57.0	43.3	52.0	36.4	34.5	27.2	30.4

#### **Definition**

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

#### Example

In 2002, 179 new AIDS cases among Boston residents were diagnosed. The incidence rate was 30.4 new AIDS cases per 100,000 Boston residents.

#### Note

The rates for years prior to 2002 have been updated and may differ from those reported in previous years.

#### **Data Source**

Massachusetts Department of Public Health, HIV/AIDS Surveillance Program

## **HIV/AIDS**

Incidence of Reported HIV/AIDS by Sex and by Race/Ethnicity, Boston, as of February, 2004							
	Fen	nale	Ma	ale			
	Number	Rate	Number	Rate			
BOSTON	96	31.4	268	94.5			
Black	65	85.5	102	158.7			
Latino	18	41.5	41	98.2			
White	11	7.4	118	82.9			

Boston overall had 364 cases, an incidence rate of 61.8.

#### Definition

The incidence rate represents the number of new cases diagnosed and reported per 100,000 population.

#### Note

There were 7 cases reported of HIV/AIDS among males of other or unknown race/ethnicity.

### **Data Source**

Massachusetts Department of Public Health, HIV/AIDS Surveillance Program

### **CITYWIDE BOSTON DATA**

### **HIV/AIDS**

Incidence of Reported HIV/AIDS by Age Group, Boston, as of February, 2004					
	Number	Rate			
BOSTON	364	61.8			
Ages < 20	13	9.2			
Ages 20 to 29	61	44.1			
Ages 30 to 39	142	137.3			
Ages 40 to 49	113	153.8			
Ages > 49	35	26.5			

### **Definition**

The incidence rate represents the number of new cases diagnosed and reported per 100,000 population.

### **Data Source**

Massachusetts Department of Public Health, HIV/AIDS Surveillance Program

Decree of Directly of the CD.			D	
Percent Distribution of Re	ported HIV/AIDS Cases t	y Moae ot Exposure	e, Boston, as	of February, 2004

	Ove	Overall Female		nale	Male	
Mode of Exposure	Number	Percent	Number	Percent	Number	Percent
Male Sex With Male (MSM)	141	38.7%	0	0.0%	141	52.6%
Injection Drug Use (IDU)	58	15.9%	17	17.7%	41	15.3%
MSM & IDU	13	3.6%	0	0.0%	13	4.9%
Heterosexual	54	14.8%	36	37.5%	18	6.7%
Undetermined/Other	98	26.9%	43	44.8%	55	20.5%

### **Data Source**

Massachusetts Department of Public Health, HIV/AIDS Surveillance Program

#### CITYWIDE BOSTON DATA

#### SEXUALLY TRANSMITTED DISEASES

#### Introduction

In the United States, chlamydia, gonorrhea, and syphilis are the most common sexually transmitted diseases (STDs), with 1.2 million cases reported in 2002 and many more not reported. About a third of all cases are among adolescents. Reported STD rates are higher among Blacks and Latinos than Whites. Chlamydia is the most commonly reported infectious disease in the US. If untreated, it can result in pelvic inflammatory disease (PID) in women, leading to infertility. Untreated gonorrhea can also cause PID, as well as infertility in both men and women, and stillbirth or blindness in newborns. Syphilis, if untreated, can cause permanent damage the nervous system. It can also be transmitted from pregnant women to their infants, resulting in preterm delivery, deafness, seizures, or infant death.

#### Incidence Rates of Reported Sexually Transmitted Diseases by Year, 1998-2002

	1998		1999		2000		2001		2002	
	Number	Rate								
BOSTON	3,752	665.4	3,568	618.8	4,240	719.7	4,318	732.9	4,467	758.2
Syphilis	235	41.7	163	28.3	143	24.3	148	25.1	199	33.8
Gonorrhea	995	176.5	847	146.9	1,134	192.5	1,323	224.6	1,295	219.8
Chlamydia	2,522	447.3	2,558	443.7	2,963	502.9	2,847	483.2	2,973	504.6

#### **Definition**

The incidence rate represents the number of new cases of STDs diagnosed and reported in 2002 per 100,000 population.

## Example

In 2002, 4,467 new cases of STDs among Boston residents were diagnosed and reported. The rate was 758.2 new cases per 100,000 Boston residents.

#### **Data Sources**

Massachusetts Department of Public Health, STD Division, and Boston Public Health Commission, Communicable Disease Control Division

### **CITYWIDE BOSTON DATA**

### **SEXUALLY TRANSMITTED DISEASES**

## Incidence of Reported Sexually Transmitted Disease\* by Race/Ethnicity, Boston, 2002

	Number	Rate
BOSTON	4,467	758.2
Asian	80	180.7
Black	1,736	1,237.3
Latino	606	712.2
White	492	168.7
Other/Unknown	1,553	

### Definition

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

#### Note

\*Chlamydia, gonorrhea, and syphilis combined.

#### **Data Sources**

Massachusetts Department of Public Health, STD Division, and Boston Public Health Commission Communicable Disease Control Division

### **CITYWIDE BOSTON DATA**

### **VIOLENCE**

#### Introduction

Violence takes many forms – armed or unarmed assault, physical abuse within intimate relationships, workplace violence, and sexual assault and rape. Violence-related injuries discussed in this report primarily focus on non-fatal armed assaults and exclude accidental injuries.

## Victims of Non-Fatal Assault-Related Gunshots and Stabbings By Race/Ethnicity and Year, Boston, 2000-2002

	Number of Assaults			
	2000	2001	2002	
Asian	8	9	7	
Black	298	262	243	
Latino	82	97	65	
White	67	75	51	
Other	15	6	8	
Unknown/Missing	26	29	25	
TOTAL	496	478	399	

	Percentage Distribution of Assaults				
	2000	2001	2002		
Asian	1.6%	1.9%	1.8%		
Black	60.1%	54.8%	60.9%		
Latino	16.5%	20.3%	16.3%		
White	13.5%	15.7%	12.8%		
Other	3.0%	1.3%	2.0%		
Unknown/Missing	5.2%	6.1%	6.3%		
TOTAL	100.0%	100.0%	100.0%		

**Data Source** 

Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System

### **VIOLENCE**

## Victims of Non-Fatal Assault-Related Gunshots and Stabbings By Age Group and Year, Boston, 2000-2002

	Number of Assaults			
	2000	2001	2002	
0-14	6	N<5	6	
15-19	101	93	88	
20-24	118	119	107	
25-34	139	144	96	
35-44	87	75	61	
45-64	32	34	28	
65+	*	N<5	N<5	
Unknown/Missing	10	8	9	
TOTAL	496	478	398	

	Percent Distribution of Assaults				
	2000	2001	2002		
0-14	1.2%	N<5	1.5%		
15-19	20.4%	19.5%	22.1%		
20-24	23.8%	24.9%	26.9%		
25-34	28.0%	30.1%	24.1%		
35-44	17.5%	15.7%	15.3%		
45-64	6.5%	7.1%	7.0%		
65+	*	N<5	N<5		
Unknown/Missing	2.0%	1.7%	2.3%		
TOTAL	100.0%	100.0%	100.0%		

#### Note

#### **Data Source**

Weapon-related injuries, Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System

<sup>\*</sup>Sample size too small to report.

## **CITYWIDE BOSTON DATA**

## **VIOLENCE**

Suicide Attempts Among 10-17 Year-Olds by Year, Boston, 1998-2002										
	1998		19	1999 2000		00	2001		2002	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ages 10-13	27	34.2%	23	28.8%	22	23.7%	10	14.5%	14	20.9%
Ages 14-17	52	65.8%	57	71.3%	71	76.3%	59	85.5%	53	79.1%
Total	79	100.0%	80	100.0%	93	100.0%	69	100.0%	67	100.0%

### **Data Source**

Boston Emergency Department Surveillance System, Boston Public Health Commission Data unavailable for adults ages 18+.

## **CITYWIDE BOSTON DATA**

## **OVERALL MORTALITY**

## Age-Adjusted Mortality Rates by Race/Ethnicity, Boston, 2002

	Ove	Overall		nale	Male	
Population	Number	Rate	Number	Rate	Number	Rate
BOSTON	4,412	871.1	2,320	727.8	2,092	1,070.2
Asian	135	469.0	51	306.7	84	695.4
Black	1,041	1,054.9	524	882.4	516	1,304.6
Latino	216	618.4	95	495.8	121	793.2
White	3,005	892.6	1,640	740	1,365	1,096.1

#### **Data Source**

## **CITYWIDE BOSTON DATA**

## **OVERALL MORTALITY**

	Number	Rate
Ages 1-9 Years	17	28.9
Ages 10-17 Years	11	21.7
Ages 18-24 Years	46	48.2
Ages 25-44 Years	330	156.3
Ages 45-64 Years	796	761.1
Ages 65 and Over	3,155	5,143.8

## **CITYWIDE BOSTON DATA**

## **OVERALL MORTALITY**

	Number	Rate
Cancer	1,072	218.4
Heart Disease	964	191.7
All Injuries Combined	275	47.6
Stroke	227	44.6
COPD	156	31.6
Pneumonia/Influenza	160	30.8
Diabetes	140	28.5
Septicemia	112	22.6
Substance Abuse	116	21.5
Nephritis/Nephrosis	107	21.0

56

61

82

55

44

32.5

31.9

31.6

31.6

24.3

### **CITYWIDE BOSTON DATA**

### **OVERALL MORTALITY**

Females			Males			
Cause of Death	Number	Age-Adjusted Rate	Cause of Death	Number	Age-Adjusted Rate	
Cancer	556	188.3	Cancer	516	269.3	
Heart Disease	508	153.2	Heart Disease	456	244.6	
Stroke	135	39.7	All Injuries Combined	194	70.9	
Pneumonia/Influenza	104	29.3	Stroke	92	51.5	
All Injuries Combined	81	27.0	COPD	78	41.4	

26.6

24.8

22.0

15.7

9.6

Pneumonia/Influenza

Substance Abuse

Nephritis/Nephrosis

Diabetes

Septicemia

Leading Causes of Death by Sex, Boston, 2002

#### **Data Source**

Diabetes

Septicemia

Nephritis/Nephrosis

Substance Abuse

COPD

Boston resident deaths, Massachusetts Department of Public Health

79

78

68

52

27

## **CITYWIDE BOSTON DATA**

## **OVERALL MORTALITY**

Cause of Death	Number	Rate	Cause of Death	Number	Rate
Ages 1-17 Years			Ages 25-44 Years		
All Other Causes	33	15.1	Substance Abuse	121	28.6
Homicide	11	5.0	Undetermined Injuries	98	23.2
Accidents	10	4.6	All Cancer	92	21.8
Overall	54	24.6	Heart Disease	71	16.8
Ages 18-24 Years			HIV/AIDS	63	14.9
Homicide	43	22.5	Homicide	57	13.5
Substance Abuse	10	5.2	Suicide	31	7.3
Undetermined Injuries	10	5.2	Motor Vehicle	27	6.4
Motor Vehicle	9	4.7	Other Accidents	21	5.0
All Cancer	6	3.1	Chronic Liver Disease	17	4.0
All Other Causes	6	3.1	Overall	694	164.3
Overall	84	44.0			

## **Data Source**

## **CITYWIDE BOSTON DATA**

## **OVERALL MORTALITY**

•	Age-Specific Mortality Ra	tes for Leading Caus	Causes of Death by Age Group, Boston, 2001-2002				
Cause of Death	Number	Rate	Cause of Death	Number	Rate		
Ages 45-64 Years			Ages 65 and Over				
All Cancer	522	249.6	Heart Disease	1,691	1,378.		
Heart Disease	294	140.6	All Cancer	1,479	1,205.		
All Injuries Combined	111	53.1	Stroke	411	335.0		
Substance Abuse	99	47.3	Pneumonia/Influenza	300	244.		
HIV/AIDS	66	31.6	COPD	283	230.		
Diabetes	58	27.7	Nephritis/Nephrosis	183	149.		
Stroke	56	26.8	Septicemia	180	146.		
Chronic Liver Disease	45	21.5	Diabetes	178	145.		
COPD	43	20.6	Alzheimers Disease	177	144.3		
Septicemia	43	20.6	All Injuries Combined	131	106.8		
Overall	1,570	750.6	Overall	6,465	5,270.2		

## **Data Source**

#### **CITYWIDE BOSTON DATA**

#### SUBSTANCE ABUSE

#### Introduction

The use and abuse of alcohol and drugs affect both personal and public health. Among the consequences are addiction, physical and mental illness, loss of productivity, crime, and premature death. Treatment for substance abuse is provided in acute care hospitals, hospital emergency departments, and programs in other facilities specializing in treatment of substance abuse problems. According to the US Centers for Disease Control and Prevention, in 2001, 2.5 million hospital emergency department visits (2.3%) in the US were related to alcohol use. During 2001, there were 19,817 alcohol-induced deaths in the US (6.9 deaths per 100,000 population) and 21,683 drug-induced deaths (7.6 deaths per 100,000 population) according to the National Center for Health Statistics.

## Any Lifetime Use of Illegal Drugs by High School Students, Boston, 2003

	BOSTON	Asian	Black	Latino	White	Male	Female
Any illegal drug use	38.9%	25.6%	41.1%	36.4%	40.1%	38.5%	39.1%
Marijuana	37.0%	19.1%	39.4%	33.5%	40.7%	36.0%	37.8%
Cocaine	3.2%	5.2%	3.1%	2.0%	4.2%	5.1%	1.4%
MDMA (Ecstacy)	6.0%	11.7%	3.5%	6.8%	10.4%	6.5%	5.5%
Heroin	1.9%	2.8%	2.0%	2.5%	0.7%	3.2%	0.7%
Methamphetamines	3.6%	3.8%	2.7%	2.6%	6.8%	4.9%	2.1%
Steroids	2.7%	3.5%	1.6%	3.0%	4.1%	3.5%	1.8%
Others	4.1%	2.1%	2.1%	1.8%	13.6%	5.3%	2.9%
Injection drug use	2.3%	2.0%	2.2%	2.5%	1.9%	4.0%	0.6%
Glue sniffing	4.8%	3.5%	4.9%	3.6%	5.0%	5.7%	4.0%

#### **Example**

38.9% of Boston high school students report ever having used any illegal drug. A lower percentage of Asian students (23.6%) and a higher percentage of Black and White students (41.0% and 41.1% respectively) report ever having used any illegal drug.

#### Note

Percentages are weighted.

#### **Data Sources**

Youth Risk Behavior Survey, Massachusetts Department of Education, and Boston Public Schools

#### **SUBSTANCE ABUSE**

#### Any Past-Month Use of Drugs by High School Students, Boston, 2003

	BOSTON	Asian	Black	Latino	White	Male	Female
Any illegal drug use	21.2%	11.8%	22.5%	17.9%	23.2%	23.5%	19.0%
Marijuana	19.6%	8.8%	21.1%	15.5%	22.7%	21.5%	17.9%
Any other drugs	3.7%	3.7%	2.3%	4.6%	6.8%	4.4%	3.0%

#### Example

More than one in five (21.2%) Boston high school students reported using an illegal drug during the past month. A higher percentage of male (23.5%) than female (19.0%) Boston high school students acknowledged past-month illegal drug use.

#### Note

Percentages are weighted.

#### **Data Sources**

Youth Risk Behavior Survey, Massachusetts Department of Education, and Boston Public Schools

## Lifetime Illegal Drug Use by High School Students by Race/Ethnicity, 1997-2003

	BOSTON	Asian	Black	Latino	White
1997	43.0%	18.8%	51.8%	44.4%	49.3%
1999	39.0%	17.6%	43.8%	36.5%	48.6%
2001	42.6%	28.0%	44.3%	35.9%	52.1%
2003	39.2%	25.6%	41.1%	36.4%	40.1%

#### Note

Percentages are weighted.

#### **Data Sources**

Youth Risk Behavior Survey, Massachusetts Department of Education, and Boston Public Schools

### **SUBSTANCE ABUSE**

## Publicly-Funded Substance Abuse Treatment Admissions by Primary Drug, Boston, July 2001 – June 2002

Primary Drug Of Abuse	Number of Admissions	Rate per 1,000 Population
Alcohol	8,429	14.3
Cocaine	858	1.5
Crack	1,269	2.2
Heroin	9,360	15.9
Marijuana	959	1.6
Other	763	1.3
TOTAL	21,638	36.7

#### **Definitions**

Publicly-funded substance abuse treatment facilities in Boston operate with federal, state, and city funding sources.

Fiscal year: July 1 of one year to June 30 of the next. Named for the latter year.

#### Example

In fiscal year 2002, the substance listed by the largest number Boston residents entering publicly funded treatment facilities as their primary drug was heroin. The rate of heroin use in this group of people was 15.9 per thousand population.

#### **Data Source**

Massachusetts Department of Public Health, Bureau of Substance Abuse Services

### **CITYWIDE BOSTON DATA**

### **SUBSTANCE ABUSE**

# Publicly-Funded Substance Abuse Treatment Admissions by Race/Ethnicity and Age Group Boston, July 2001 – June 2002

	Number of Admissions	Rate per 1,000 Population
Black	7,096	50.6
Latino	4,159	48.9
White	9,542	32.7
Other	841	11.7
0-20	937	6.0
21-29	4,577	37.0
30-39	8,050	77.8
40+	8,074	39.3

### Example

There were 7,096 admissions to publicly-funded substance abuse treatment facilities among Black Boston residents in fiscal year 2002.

#### **Data Source**

Massachusetts Department of Public Health, Bureau of Substance Abuse Services

### **SUBSTANCE ABUSE**

### Boston Police Department Drug Arrests (Number) by Drug Class and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Class A: mainly heroin	1,392	1,061	984	1,022	905	947
Class B: mainly cocaine/crack	2,918	2,225	1,847	1,532	1,428	1,762
Class D: mainly marijuana	1,617	1,211	1,133	1,093	982	1,375
Other	216	226	133	123	111	125
TOTAL	6,143	4,723	4,097	3,770	3,426	4,209

### Boston Police Department Drug Arrests (Percent) by Drug Class and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Class A: mainly heroin	22.7%	22.5%	24.0%	27.1%	26.4%	22.5%
Class B: mainly cocaine/crack	47.5%	47.1%	45.1%	40.6%	41.7%	41.9%
Class D: mainly marijuana	26.3%	25.6%	27.7%	29.0%	28.7%	32.7%
Other	3.5%	4.8%	3.2%	3.3%	3.2%	3.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.1%*

### Example

The 1,392 arrests by the Boston Police Department for Class A drugs (mainly heroin) in 1997 accounted for 22.7% of drug arrests that year.

#### Note

\*Column does not total 100.0% due to rounding.

#### **Data Source**

### **CITYWIDE BOSTON DATA**

### **SUBSTANCE ABUSE**

Boston Police Department Drug Arrests (Number) by Race* and Year, Boston, 1997-2002							
	1997	1998	1999	2000	2001	2002	
Asian	53	67	57	37	32	42	
Black	3,288	2,544	2,309	1,887	1,872	2,424	
White	2,791	2,108	1,722	1,839	1,517	1,739	
TOTAL	6,143	4,723	4,097	3,770	3,426	4,209	

#### **Notes**

\*Persons of Latino ethnicity are included in the above racial groups.

There were too few persons of "Other" race in some years to be reported.

### **Data Source**

## **SUBSTANCE ABUSE**

Boston Police Department Drug Arrests (Percent) by Race* and Year, Boston, 1997-2002							
	1997	1998	1999	2000	2001	2002	
Asian	0.9%	1.4%	1.4%	1.0%	0.9%	1.0%	
Black	53.5%	53.9%	56.4%	50.1%	54.6%	57.6%	
White	45.4%	44.6%	42.0%	48.8%	44.3%	41.3%	
Other	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%	

### Note

\*Persons of Latino ethnicity are included in the above racial groups.

#### **Data Source**

### **SUBSTANCE ABUSE**

## Boston Police Department Drug Arrests (Number) by Latino Ethnicity and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Latino	1,329	1,101	843	963	938	1,002
Non-Latino	4,814	3,622	3,254	2,807	2,488	3,207
TOTAL	6,143	4,723	4,097	3,770	3,426	4,209

#### **Data Source**

Boston Police Department, Office of Research and Evaluation

## Boston Police Department Drug Arrests (Percent) by Latino Ethnicity and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
Latino	21.6%	23.3%	20.6%	25.5%	27.4%	23.8%
Non-Latino	78.4%	76.7%	79.4%	74.5%	72.6%	76.2%

#### **Data Source**

### **CITYWIDE BOSTON DATA**

### **SUBSTANCE ABUSE**

## Boston Police Department Drug Arrests (Number) by Age Group and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
< 20	1,117	792	767	673	598	762
20 - 24	1,082	835	692	679	665	919
25 - 39	2,916	2,172	1,790	1,663	1,444	1,671
40+	1,028	924	848	755	719	857
TOTAL	6,143	4,723	4,097	3,770	3,426	4,209

### Boston Police Drug Arrests (Percent) by Age Group and Year, Boston, 1997-2002

	1997	1998	1999	2000	2001	2002
< 20	18.2%	16.8%	18.7%	17.9%	17.5%	18.1%
20 - 24	17.6%	17.7%	16.9%	18.0%	19.4%	21.8%
25 - 39	47.5%	46.0%	43.7%	44.1%	42.1%	39.7%
40+	16.7%	19.6%	20.7%	20.0%	21.0%	20.4%

### **Data Source**

#### SUBSTANCE ABUSE

Number of Substance Abuse Hospitalizations by Race/Ethnicity and Year, Boston, 1998-2002							
Null	T.	·		· · · · · · · · · · · · · · · · · · ·			
	1998	1999	2000	2001	2002		
Asian (may include Latinos)	19	39	N<5	9	11		
Black (may include Latinos)	356	274	298	281	242		
Latino	249	300	79	94	119		
White (may include Latinos)	1,235	1,136	1,076	1,109	1,169		
BOSTON	1,975	1,843	1,456	1,493	1,541		

#### **Notes**

Some hospitalization records did not note the race/ethnicity of the patient. Racial/ethnic information in the hospitalization data should be interpreted with caution because such information is not collected consistently by Massachusetts hospitals. Latinos may be found in any of the above categories, depending on the individual hospital's reporting practices.

#### **Data Source**

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

Age-Adjusted Rates of Substance Abuse Hospitalization by Race/Ethnicity and Year, Boston, 1998-2002							
Age-Adju	isted Rates of S	ubstance Abuse Hosp	oitalization by Race/Eth	inicity and Year, Bostoi	ո, 1998-2002		
	1998	1999	2000	2001	2002		
Asian (may include Latinos)	0.4	0.9	N<5	0.2	0.2	,	
Black (may include Latinos)	2.5	1.9	2.1	2.1	1.8	,	
Latino	2.9	3.7	1.0	1.4	1.6		
White (may include Latinos)	3.7	3.5	3.4	3.4	3.7		
BOSTON	3.4	3.2	2.6	2.6	2.7		

#### **Notes**

Some hospitalization records did not note the race/ethnicity of the patient. Racial/ethnic information in the hospitalization data should be interpreted with caution because such information is not collected consistently by Massachusetts hospitals. Latinos may be found in any of the above categories, depending on the individual hospital's reporting practices.

#### **Data Source**

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

#### **CITYWIDE BOSTON DATA**

#### **HEART DISEASE**

#### Introduction

Heart disease – also known as cardiovascular disease – is a group of disorders that affect the heart and blood vessels, and is a leading cause of death. The two major independent risk factors for coronary heart disease are hypertension (high blood pressure) and high blood cholesterol. (1) There are a variety of other risk factors associated with coronary heart disease and these include age, gender, race and ethnicity, tobacco smoke exposure, poor nutrition, physical inactivity, increased weight, and diabetes.(1,2)

## At Risk for Health Problems Due to Inadequate Physical Activity by Race/Ethnicity and Income, Boston, 2001

	<\$25,000	\$25,000-\$49,999	\$50,000+
BOSTON	65.1%	57.2%	50.2%
Black	70.1%	64.3%	64.4%
Latino	73.7%	54.2%	*
White	59.4%	51.8%	47.8%

#### Notes

Percentages are weighted. Physical inactivity means having no physical activity or less than 30 or more minutes, five or more times a week.

- (1) Centers for Disease Control and Prevention. Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers, 2003.
- (2) American Heart Association. Heart Disease and Stroke Statistics-2003 Update.

#### **Data Source**

<sup>\*</sup>The sample sizes for Asians, and Latinos in the \$50,000+ income group, were too small to permit reporting.

#### **HEART DISEASE**

### Health Provider-Diagnosed High Blood Pressure Among Adults by Race/Ethnicity by Income, Boston, 1999 and 2001

	<\$25,000	\$25,000-\$49,999	\$50,000+
BOSTON	23.1%	17.6%	14.3%
Black	31.8%	30.4%	23.9%
Latino	23.0%	7.3%	16.8%
White	20.1%	17.4%	12.8%

#### Example

For Boston overall for the period 1999-2001, 23.1% of the people with an income under \$25,000 annually had been told by a health care provider that they had high blood pressure, compared with just 14.3% of people with an income of \$50,000 annually or higher.

#### Notes

The sample size for Asians was too small to permit reporting.

\*Small sample size. Percentages shown are weighted.

#### **Data Source**

#### CITYWIDE BOSTON DATA

#### **HEART DISEASE**

### Heart Disease Mortality: Age-Adjusted Rates by Sex and Year, Boston.1995-2002

	19	95	19	96	19	97	19	98	19	99	20	00	20	01	20	02
	N	Rate	N	Rate	Ν	Rate	N	Rate	N	Rate	N	Rate	Ν	Rate	Ν	Rate
Boston	1247	258.2	1196	247.9	1201	248.0	1185	241.2	1138	226.6	1067	211.1	1112	220.1	964	191.7
Male	535	310.4	562	329.7	555	320.9	553	311.8	516	283.3	511	274.5	518	279.4	456	244.6
Female	712	221.7	634	190.1	646	196.1	632	193.4	622	183.8	556	165.6	594	176.7	508	153.2

#### **Definition**

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

#### **Examples**

For all years shown in the table above, there were more heart disease deaths among Boston women than Boston men, but the rates of death for women were lower. This is explained by the fact that there are more elderly women in the population.

In 1995, the death rate from heart disease was 258.2 deaths per 100,000 population. This rate had fallen to 191.7 per 100,000 by 2002. The heart disease mortality rate for males (244.6) was much higher than that for females (153.2), as had been the case throughout the period 1995-2002.

#### **Data Source**

### **HEART DISEASE**

## Heart Disease Mortality: Age-Adjusted Rates by Race/Ethnicity and Year, Boston, 1995-2002

	19	95	19	96	19	97	19	98	19	99	20	00	20	01	20	02
	N	Rate	N	Rate												
Boston	1247	258.2	1196	247.9	1201	248.0	1185	241.2	1138	226.6	1067	211.1	1112	220.1	964	191.7
Asian	30	166.5	24	125.3	20	97.4	31	144.2	21	79.0	25	85.6	24	85.0	18	65.3
Black	199	236.9	209	255.1	204	242.8	241	275.7	190	206.6	216	224.8	221	239.6	205	220.7
Latino	19	62.1	30	103.8	29	92.8	26	73.9	39	126.7	20	63.3	32	123.9	30	129.8
White	999	275.6	933	260.5	948	269.3	887	247.6	888	247.3	802	230.6	834	238.1	709	205.4

#### **Definition**

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

## Example

Heart disease mortality rates were lower in 2002 than in 1995 for Asians, Blacks, and Whites, but were higher for Latinos.

#### **Data Source**

#### CITYWIDE BOSTON DATA

#### **CANCER**

#### Introduction

Cancer is a group of diseases characterized by the spread and growth of abnormal cells. Among the risk factors for cancer are tobacco use, exposure to certain chemicals, radiation, infectious organisms, sunlight; heredity, use of certain hormones, some immune and metabolic mutations, and age.

The American Cancer Society estimates that 1.3 million people in the US were diagnosed with cancer in 2003. African Americans and other minority racial/ethnic groups are disproportionately affected. In 2002, cancer was the second leading cause of death in the US. About one-third of all expected cancer deaths related to limited physical activity, obesity, nutrition, and other lifestyle factors are preventable.

#### Ever had a PSA Test for Prostate Cancer by Race/Ethnicity and Income, Boston\*, 1999 and 2001

	<\$25,000	\$25,000-\$49,999	\$50,000+
BOSTON	41.2%	53.4%	55.7%
Black	56.4%	79.5%	**
White	40.1%	57.3%	57.4%

#### **Definition**

PSA: Prostate-specific antigen. PSA in the blood is measured in screening for prostate cancer.

#### Example

A higher percentage of high-income Boston men have ever had a PSA test, compared with men with low or moderate incomes.

#### Notes

\*Among Boston men ages 40 and over

\*\*The sample size was too small to permit reporting.

Percentages are weighted.

#### **Data Source**

### **CANCER**

## Ever had a Mammogram by Race/Ethnicity and Income, Boston\*, 1999-2001

	<\$25,000	\$25,000-\$49,999	\$50,000+
BOSTON	92.0%	97.4%	90.7%
Black	98.7%	97.7%	85.4%
White	88.7%	98.4%	91.2%

#### Example

Most Boston women who are 40 or older reported ever having had a mammogram. That finding ranged from a low of 85.4% of higher-income (more than \$50,000 a year) Black women to a high of 98.7% of low-income (less than \$25,000 a year) Black women.

#### Notes

\*Among Boston women ages 40 and over Percentages are weighted.

#### **Data Sources**

## **CANCER**

### Ever had a Pap Test by Race/Ethnicity and Income, Boston\*, 1999-2001

	<\$25,000	\$25,000-\$49,999	\$50,000+
BOSTON	90.0%	95.6%	96.4%
Black	100.0%	99.9%	97.0%
Latino	91.0%	88.6%	**
White	86.9%	99.0%	96.5%

#### Example

High percentages of Boston women reported ever having had a Pap test, regardless of their race/ethnicity. Black Boston women had the highest level of testing, compared with Latinas and White women.

#### **Notes**

\*Among Boston women ages 18 and over

\*\*The sample size was too low to permit reporting.

Percentages are weighted.

#### **Data Sources**

### **CANCER**

## Cancer Mortality: Age-Adjusted Rates by Sex and Year, Boston, 1995-2002

	В	OSTON		Male	Female		
	Number of	Deaths per 100,000	Number of	Deaths per 100,000	Number of	Deaths per 100,000	
	Deaths	Population	Deaths	Population	Deaths	Population	
1995	1,128	248.0	548	314.0	580	207.7	
1996	1,158	257.3	580	331.3	578	211.1	
1997	1,094	234.9	541	313.0	553	201.6	
1998	1,058	233.7	530	299.8	528	191.0	
1999	1,057	221.9	523	278.5	534	183.7	
2000	1,109	228.9	563	294.0	546	185.2	
2001	1,030	209.4	504	260.9	526	178.3	
2002	1,072	218.4	516	269.3	556	188.3	

#### Definition

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

## **Examples**

The number of cancer deaths has fallen over time, from 1,128 in 1995 to 1,072 in 2002.

The rates have also fallen, from 248.0 in 1995 to 218.4 in 2002.

Cancer mortality rates for men are consistently higher than those for women, but have fallen for both sexes during this time period.

### **Data Source**

## **CANCER**

## Cancer Mortality: Age-Adjusted Rates by Race/Ethnicity and Year, Boston, 1995-2002

	Asian		BI	ack	La	tino	White		
	Number of	Deaths per							
	Deaths	100,000	Deaths	100,000	Deaths	100,000	Deaths	100,000	
		Population		Population		Population		Population	
1995	34	170.7	244	289.6	28	92.8	820	251.7	
1996	41	200.3	230	268.4	26	73.6	861	274.8	
1997	41	202.4	221	257.9	30	81.2	801	258.6	
1998	40	170.2	241	272.6	33	99.9	742	239.0	
1999	42	156.8	238	247.3	37	112.3	740	229.8	
2000	33	112.8	273	276.9	39	128.1	764	240.8	
2001	35	112.1	254	254.2	42	155.4	698	220.4	
2002	47	160.1	251	257.3	40	138.7	733	230.5	

## Definition

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

#### Example

As of 2002, Black residents had the highest cancer mortality rate of all Bostonians, with 257.3 cancer deaths per 100,000 population.

#### **Data Source**

#### CANCER

## Cancer Mortality: Age-Adjusted Rates for Leading Types of Cancer by Sex, Boston, 2001-2002

	Number of Deaths	Deaths per 100,000 Population
Male		
Lung	283	72.5
Prostate	114	33.3
Colorectal	116	30.5
Pancreas	59	15.0
Liver	51	11.9
Female		
Lung	272	47.6
Breast	166	28.2
Colorectal	137	22.2
Pancreas	57	9.2
Ovarian	47	8.1

#### **Definitions**

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

#### **Example**

For the period 2001-2002, there were 283 lung cancer deaths among Boston men and 272 among Boston women. The lung cancer death rate for men was an average of 72.5 deaths per 100,000 Boston men per year and 47.6 deaths per 100,000 Boston women per year.

#### **Data Source**

## **CANCER**

## Cancer Mortality: Age-Adjusted Rates for Leading Types of Cancer by Race/Ethnicity, Boston, 2001-2002

	Number of Deaths	Deaths per 100,000 Population
Asian		
Lung	32	36.2
Breast	10	20.4
Colorectal	12	13.3
Liver	12	12.4
Stomach	6	6.2
Black		
Prostate	58	68.7
Lung	181	60.1
Breast	65	33.6
Colorectal	79	28.6
Pancreas	45	15.5
Latino		
Prostate	7	28.6
Lung	15	22.0
Colorectal	13	14.5
Liver	15	14.3
Breast	7	9.6
White		
Lung	611	66.4
Prostate	107	30.0
Breast	166	29.6
Colorectal	262	26.4
Pancreas	106	11.1

## Example

There were 32 lung cancer deaths among Asian Boston residents in 2001 and 2002, a mortality rate of 36.2 lung cancer deaths per year among Asians, per 100,000 Asian residents.

## **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

### **DIABETES**

#### Introduction

Diabetes is a chronic disease in which the body does not produce adequate insulin or does not properly use insulin. Complications resulting from diabetes include heart disease, stroke, high blood pressure, kidney disease, amputations, blindness, and complications of pregnancy. Type 1 diabetes occurs when the body does not produce insulin. Type 2 diabetes, the more common of the two types, occurs when the body does not properly use insulin. According to the American Diabetes Association, as of 2002, 6.3% of the US population was estimated to have diabetes. Diabetes is about evenly distributed by sex, but its occurrence increases with age. It is also more common among non-Latino Blacks, American Indians, and Alaska Natives. In 2002, diabetes was the sixth leading cause of death in the US.

## Diabetes by Sex, Race/Ethnicity, and Income, Boston, 2001

	Percent
BOSTON	6%
Male	4%
Female	7%
Asian	*
Black	14%
Latino	5%
White	5%
<\$25K	7%
\$25K-34,999	10%
\$35K-49,999	8%
\$50K-74,999	3%
\$75K or more	3%

#### Example

Approximately 6% of Boston's adult population reported that they had ever been told by a health care provider that they had diabetes. Black residents reported diabetes much more frequently (14% of adults) than did Latino or White residents (both 5%).

#### Note

\*Sample size too small to report.

#### **Data Sources**

Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, and Boston Public Health Commission

## **DIABETES**

## Diabetes Mortality: Age-Adjusted Rates by Sex and Year, Boston, 1995-2002

	ВС	OSTON		Male		Female
	Number of	Deaths per 100,000	Number of	Deaths per 100,000	Number of	Deaths per 100,000
	Deaths	Population	Deaths	Population	Deaths	Population
1995	116	24.9	49	28.2	67	22.6
1996	93	20.6	49	28.6	44	15.6
1997	120	26.1	49	28.4	71	24.6
1998	115	24.5	52	28.5	63	21.2
1999	108	22.6	52	28.0	56	19.6
2000	98	19.8	36	18.3	62	20.1
2001	107	21.4	41	20.9	66	20.8
2002	140	28.5	61	31.9	79	26.6

#### **Definition**

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

## Example

There were 116 deaths due to diabetes among Boston residents in 1995 and 140 such deaths in 2002. The mortality rate due to diabetes rose from 24.9 deaths per 100,000 population in 1995 to 28.5 in 2002.

### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

## **DIABETES**

## Diabetes Mortality: Age-Adjusted Rates by Race/Ethnicity and Year, Boston, 1995-2002

	Asia	an	Bla	ck	La	tino	٧	Vhite
	Number of	Deaths per						
	Deaths	100,000	Deaths	100,000	Deaths	100,000	Deaths	100,000
		Population		Population		Population		Population
1995	n<5	n<5	32	41.1	9	34.7	72	20.8
1996	n<5	n<5	34	40.5	n<5	n<5	55	16.9
1997	n<5	n<5	47	55.3	8	28.4	63	18.4
1998	n<5	n<5	38	43.6	n<5	n<5	70	21.5
1999	n<5	n<5	36	39.8	7	22.9	63	19.4
2000	n<5	n<5	31	33.0	14	52.2	51	15.2
2001	6	20.7	40	41.8	5	21.9	56	16.6
2002	5	18.6	47	48.3	11	38.7	76	23.4

#### Definition

Age-adjusted mortality rate: The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to the 2000 US standard population.

## Example

The number of deaths due to diabetes has risen in the Black population over time, as has the diabetes mortality rate. In 1995, there were 32 deaths, a rate of 41.1 diabetes deaths per 100,000 Black population. In 2002, there were 47 diabetes deaths among Black residents of Boston, a mortality rate of 48.3.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

**BOSTON NEIGHBORHOOD DATA** 

## **BOSTON NEIGHBORHOOD DATA**

### **DEMOGRAPHICS**

	P	opulation by F	Race/Ethnicity (	Number) by No	eighborhood, E	Boston, 2000			
	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND
Asian	9,567	3,119	753	1,542	3,567	538	890	134	7,385
Black	3,110	1,253	539	1,177	2,511	13,487	4,142	16,480	36,914
Latino	6,336	1,691	1,764	14,990	2,631	4,634	8,466	1,456	13,942
White	47,835	29,351	11,946	11,946	20,091	14,442	16,480	513	15,329
Other*	977	161	54	522	252	259	190	141	5,119
Two or More	1,823	660	139	1,104	771	1,060	712	1,000	4,523
Total	69,648	36,235	15,195	38,413	29,823	34,420	29,482	19,724	83,212
	NE	ROS	ROX	SB	SD	SE	WR	Boston	
Asian	324	1,368	2,332	1,154	2,702	7,650	980	44,009	
Black	203	4,851	26,421	741	21,523	5,033	1,576	140,305	
Latino	351	6,456	10,988	2,235	3,827	3,947	1,255	85,089	
Latino White	351 11,082	6,456 21,015	10,988 7,760	2,235 25,316	3,827 14876	3,947 15,947	1,255 21,638	85,089 291,561	
			ŕ		·	•	·	·	
White	11,082	21,015	7,760	25,316	14876	15,947	21,638	291,561	

### Note

"Other" race/ethnicity includes Native Hawaiians/Other Pacific Islanders, Alaska Native/American Indians, and Other Races.

## **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

### **BOSTON NEIGHBORHOOD DATA**

### **DEMOGRAPHICS**

	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND
Asian	14%	9%	5%	4%	12%	2%	3%	1%	9%
Black	4%	4%	4%	3%	8%	39%	14%	84%	44%
Latino	9%	5%	12%	39%	9%	13%	29%	7%	17%
White	69%	81%	79%	50%	67%	42%	51%	3%	18%
Other*	1%	<1%	0.4%	1%	<1%	1%	1%	1%	6%
Two or More	3%	2%	1%	3%	3%	3%	2%	5%	5%
	NE NE	ROS	ROX	SB	SD	SE	WR	Boston	
Asian	3%	4%	5%	4%	6%	23%	4%	8%	
Black	2%	14%	52%	2%	48%	15%	6%	24%	
Latino	3%	18%	22%	7%	8%	12%	5%	14%	
White	92%	60%	15%	85%	33%	48%	83%	50%	
Other*	<1%	1%	2%	1%	1%	<1%	1%	2%	
Two or More	1%	3%	4%	1%	4%	2%	2%	3%	

#### Note

Other" race/ethnicity includes Native Hawaiians/Other Pacific Islanders, Alaska Native/American Indians, and Other Races.

### **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

### **BOSTON NEIGHBORHOOD DATA**

### **DEMOGRAPHICS**

#### Introduction

Housing characteristics of a community can provide insight into its history, economy, changing needs, and value of its properties. The age of houses or apartment buildings is often used to help understand the condition of available housing in a community and the time such structures have been available. Housing built in 1939 or earlier is one age threshold used to indicate a potential deficiency in the property such as deterioration, nonconformance to current building standards, or lack of modern facilities.

					Housin	g Built i	n 1939 o	r Before	by Neigh	borhood	, Boston	, 2000					
	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	13,080	15,442	4,474	9,736	9,907	3,968	8,647	3,290	12,085	3,646	6,644	5,330	9,502	16,691	7,362	4,903	134,707
Percent	43.0%	62.1%	29.0%	63.1%	52.0%	35.8%	56.0%	21.3%	58.5%	83.3%	53.3%	11.8%	63.2%	87.9%	54.8%	31.8%	53.5%

#### **Definitions**

Number: The number of housing structures built in 1939 or before of total housing units in the specified neighborhood.

Percentage: The percentage of housing structures built in 1939 or before of total housing units in the specified neighborhood.

## Example

As of 2000, the Allston/Brighton neighborhood had 13,080 housing structures that were built in 1939 or before. Those housing structures represent 43% of all housing structures in Allston/Brighton.

#### **Data Source**

U.S. Department of Commerce, Bureau of the Census, American FactFinder, Census 2000

### **BOSTON NEIGHBORHOOD DATA**

### **DEMOGRAPHICS**

#### Introduction

The availability of protected open space in urban areas adds to the quality of life and health of a population. Protected open space such as parks, paths, bikeways, beaches, and playgrounds, provide relief from highly developed, dense areas and offer opportunities for relaxation and physical activity.

## Acres of Protected Open Space by Neighborhood, Boston, 2001

	A/B	ВВ	СН	DO	EB	FW	НР	JP	MAT	NE*	ROS	ROX	SB	SE	WR	Boston
Number of Acres	332	133	106	355	230	108	566	414	174	47	498	538	207	38	663	4,369
Ratio	4.8	5.0	4.5	3.9	6.0	3.0	17.8	10.8	4.7	1.9	14.4	9.5	6.9	1.3	23.1	7.43

#### **Definitions**

Number: The number of acres of protected open space available in the specified neighborhood, including parks, malls, bike paths, and playgrounds. Ratio: The number of protected open space acres per 1,000 residents of the specified neighborhood.

#### Example

As of 2001, the Allston/Brighton neighborhood had 332 acres of protected open space. This represents 4.8 acres of protected open space per 1,000 Allston/Brighton residents.

#### Note

For the purpose of this indicator, the North End is part of a larger geographic area designated by the Boston Redevelopment Authority as Central Boston. This area includes Downtown, the Financial District, Government Center, the Waterfront, the West End, Chinatown, the North End, Downtown Crossing.

#### **Data Source**

Open Space Plan 2002-2006, Boston Parks and Recreation Department, Policy and Resource Development Unit

Legend: A/B=Allston-Brighton; BB=Bay Back; CH=Charlestown; DO= Dorchester (North and South); EB=East Boston; FW=Fenway; HP=Hyde Park; JP=Jamaica Plain; MAT=Mattapan; Nr; NE=North End; ROS=Roslindale; ROX=Roxbury; SB=South Boston; SE=South End; WR=West Roxbury.

### **BOSTON NEIGHBORHOOD DATA**

## **CHILDBEARING**

## Births by Neighborhood, Boston, 2002

	A/B	ВВ	СН	ЕВ	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	581	284	258	690	142	491	448	313	1,473	93	481	838	376	736	381	368	8,011
Percentage	7.3%	3.6%	3.2%	8.7%	1.8%	6.2%	5.6%	3.9%	18.5%	1.2%	6.1%	10.5%	4.7%	9.3%	4.8%	4.6%	100.0%

### **Definition**

Percentage: The percentage of all Boston births in 2002 that were to women from the specified neighborhood.

#### Example

In 2002, there were 581 births to Allston/Brighton residents. Those births represent 7.3% of all Boston resident births in 2002.

#### **Data Source**

Boston resident live births, Massachusetts Department of Public Health

## **BOSTON NEIGHBORHOOD DATA**

### CHILDBEARING

## Women Who Reported Smoking During Pregnancy by Neighborhood, Boston, 2002

	A/B	ВВ	СН	ЕВ	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	17	N<5	10	21	N<5	21	14	12	93	N<5	15	61	30	37	13	8	358
Percent	2.9%	N<5	3.9%	3.0%	N<5	4.3%	3.1%	3.8%	6.3%	N<5	3.1%	7.3%	8.0%	5.0%	3.4%	2.2%	4.5%

### **Definition**

Percent: The percentage of births in a neighborhood that were among women who reported smoking during pregnancy

### Example

In 2002, there were 17 births to Allston/Brighton women who reported smoking during pregnancy. Those births represented 2.9% of all births to Allston/Brighton women.

#### **Data Source**

Boston resident live births, Massachusetts Department of Public Health

#### **BOSTON NEIGHBORHOOD DATA**

### **HOSPITALIZATION**

## Hospitalization Age-Adjusted Rates by Neighborhood, Boston, 2002

	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	3,315	4,205	2,018	5,291	2,542	4,318	4,425	3,451	8,536	**	4,133	6,459	4,604	11,640	4,220	3,315	75,348
Rate	107.1	104.7	141.7	137.5	124.5	146.1	128.5	137.6	166.0	**	129.1	209.9	153.2	171.0	174.7	107.1	139.5

#### **Definitions**

Number: A count of hospital discharges from acute-care hospitals among residents of that neighborhood.

Rate: The number of hospital discharges of both sexes in 2002 adjusted for age, per 1,000 residents.

### Example

Among Allston/Brighton residents of all ages, there were 3,315 hospitalizations in 2002. The annual rate was 107.1 hospitalizations per 1,000 Allston/Brighton residents.

#### **Notes**

These rates do not indicate the number of people hospitalized, but the number of hospitalizations. They may include people who were hospitalized more than once during the year.

\*\*Data for the North End are incorporated with data for the Back Bay.

### **Data Source**

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

### **BOSTON NEIGHBORHOOD DATA**

### **EMERGENCY DEPARTMENT VISITS**

#### Introduction

Traditionally, visits to hospital emergency departments are made mainly for life-threatening illnesses and injuries. However, over time, hospital emergency departments have also become an important source of routine health care.

## Emergency Department Visits by Neighborhood, Boston, 2002

	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	17,811	10,970	4,855	9,634	9,808	13,307	12,733	14,023	32,377	**	11,804	24,781	13,481	38,879	18,895	6,576	240,934
Percentage	7.4%	4.6%	2.0%	4.0%	4.1%	5.5%	5.3%	5.8%	13.4%	**	4.9%	10.3%	5.6%	16.6%	7.8%	2,7%	100.0%

#### **Definitions**

Number: A count of emergency department (ED) visits among residents of that neighborhood.

Percentage: The percentage of ED visits in 2002 of residents in that neighborhood of total ED visits made by Boston residents.

## **Example**

Among Allston/Brighton residents of all ages, there were 17,811 ED visits in 2002. That number accounted for 7.4% of all ED visits made by Boston residents.

#### **Notes**

These numbers do not indicate the number of people who went to the ED for care, but the number of visits made to the ED. They may include people who made more than one visit to an ED.

\*\*Data for the North End are incorporated with data for the Back Bay.

#### **Data Source**

Emergency department visits, Massachusetts Division of Health Care Finance and Policy

#### **BOSTON NEIGHBORHOOD DATA**

### **ASTHMA**

#### Introduction

Asthma is a condition in which the tiny vessels bringing air to the lungs constrict and become inflamed. During asthma attacks, which may be triggered by factors such as allergens, exercise, and cold temperatures, breathing becomes difficult for the asthma sufferer. Inhaled and oral medications are used to manage asthma. Hospitalizations for this condition are an indicator of the amount of asthma in a community, the severity of the condition in that population, and the adequacy of out-patient management of asthma.

## Asthma Hospitalizations, Children Under Age 5 by Neighborhood, Boston, 1998-2002

	A/B	вв	СН	ЕВ	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	35	17	20	46	14	56	86	102	288	**	81	178	43	300	59	29	1,345
Average Annual Rate	3.3	2.9	4.8	3.4	5.5	5.4	9.4	9.9	13.0	**	7.3	14.6	5.7	10.8	10.1	4.0	8.4

#### **Definitions**

Number: A count of hospital discharges from acute-care hospitals among residents of that neighborhood and the specified age.

Average Annual Rate: The average number of discharges per year for which the primary ICD code was asthma, per 1,000 children of both sexes of the specified age.

## **Example**

Among Allston/Brighton residents under age 5, there were 35 asthma hospitalizations for the period 1998-2002. The average rate for each of those five years was 3.3 hospitalizations per 1,000 Allston/Brighton residents under age 5.

\*\*Data for the North End are incorporated with data for the Back Bay. These rates do not indicate the number of people with asthma, but the number of hospitalizations for asthma. They may include people who were hospitalized more than once.

#### **Data Source**

Acute Care Hospital Case Mix files, Massachusetts Division of Health Care Finance and Policy

#### **BOSTON NEIGHBORHOOD DATA**

### CHILDHOOD LEAD SCREENING

#### Introduction

Childhood lead poisoning is a preventable environmental health problem that can affect almost every system in the body. Lead-based paint and lead-contaminated dust from old, deteriorating buildings are the major sources of lead poisoning among US children. Children under the age of 6 are at risk of lead poisoning because they grow rapidly and tend to put their hands and other objects in their mouths. A child under the age of 6 is considered to have lead poisoning if his or her blood level is 10 micrograms per deciliter or higher.

F	Prevalen	ice of E	levated	Blood	Lead L	.evels ii	n Childı	ren und	er Age	6 by N	eighbo	rhood, I	Boston,	, 2003			
	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	30	6	11	60	N<5	42	39	61	171	N<5	58	61	21	184	11	17	1774
Percentage	2.6%	1.0%	1.4%	2.1%	N<5	3.2%	2.8%	4.1%	4.8%	N<5	3.8%	3.1%	1.8%	4.5%	1.2%	1.6%	3.2%

#### **Definitions**

Number: A count of the number of children under age 6 who tested positive for elevated blood lead levels (10 micrograms per deciliter or higher) in 2003. Percentage: The percentage of children in each neighborhood who tested positive for elevated lead blood levels of those screened.

#### Example

Among Allston/Brighton children under age 6 who were screened, 30 tested positive for elevated blood lead levels. These children represented 2.6% of children in Allston/Brighton who were screened in 2003.

#### **Data Source**

Boston Public Health Commission, Office of Environmental Health, Boston Childhood Lead Poisoning Prevention Program

### **BOSTON NEIGHBORHOOD DATA**

### **HEPATITIS**

#### Introduction

Three major types of this disease of the liver are hepatitis A, B, and C. Each is caused by a virus. Hepatitis C is the most commonly reported blood-borne infection in Boston. Vaccines are available to prevent hepatitis A and hepatitis B infection; however, there is no vaccine for hepatitis C.

#### Incidence of Reported Hepatitis C by Neighborhood, Boston, 2002 A/B СН FW HP JP ND ROX WR **Boston** BB **EB** MAT NE SD ROS SB SE Number 62 30 13 73 16 41 29 28 174 N<5 70 25 144 85 64 19 1,108 85.6 190.0 98.4 142.0 286.0 188.1 89.0 62.0 53.6 119.1 209.1 N<5 154.6 71.3 283.9 191.0 72.8 Rate

#### **Definition**

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

### Example

In 2002, 62 new cases of hepatitis C among Allston/Brighton residents were diagnosed and reported. The incidence rate was 89.0 new cases of hepatitis C per 100,000 Allston/Brighton residents in 2002.

#### Note

North End data are included with data for the Back Bay.

#### **Data Source**

Communicable Disease Database, Boston Public Health Commission, Communicable Disease Control Division

#### **BOSTON NEIGHBORHOOD DATA**

#### **HIV/AIDS**

#### Introduction

Human Immunodeficiency Virus (HIV) is the organism that causes AIDS. People become infected with HIV through sexual contact, contact with infected blood, at birth (when infection can be transmitted from mother to baby), or through breastfeeding. Over a period of years, most people who are infected with HIV eventually develop AIDS as the virus damages the immune system

#### Reported HIV/AIDS Incidence by Neighborhood and Year, Boston, 2000-2002 CH EΒ **FW** HP JP ND SD **ROS** SB WR A/B BB MAT NE ROX SE **Boston** 2000 15 19 N<5 10 18 16 34 20 38 63 14 36 54 N<5 379 Number 2000 Rate 21.5 39.3 N<5 26.0 60.4 46.5 115.3 101.4 45.7 139.1 40.0 71.5 20.0 161.2 N<5 64.3 N<5 16 32 N<5 2001 13 18 14 15 16 57 332 Number 2001 Rate 37.2 N<5 50.3 46.5 67.8 90.5 25.7 63.6 16.7 170.1 N<5 56.3 18.7 36.4 81.1 52.9 2002 27 N<5 20 17 18 12 40 65 11 38 7 57 364 13 Number 75.5 2002 Rate 18.7 55.8 N<5 52.1 57.0 17.4 61.0 60.8 48.1 143.5 31.4 23.4 170.1 19.1 61.8

#### Definition

The incidence rate represents the number of new cases diagnosed and reported per 100,000 population.

#### Note

North End data are included with data for the Back Bay.

### **Data Source**

AIDS Reporting System, Massachusetts Department of Public Health, Bureau of Communicable Disease Control, HIV/AIDS Surveillance Program.

### **BOSTON NEIGHBORHOOD DATA**

208.2

### **SEXUALLY TRANSMITTED DISEASES**

#### Incidence of Reported Sexually Transmitted Disease\* by Neighborhood, Boston, 2002 JP A/B BB CH EB FW HP MAT ND NE SD ROS **ROX** SB SE WR **Boston** 147 337 138 254 295 761 828 98 567 112 245 145 190 64 15 4,467 Number

914.5

1,828.2

279.6

1,126.1

374.1

731.3

57.4

758.2

1,495.6

### **Definition**

The incidence rate represents the number of new cases diagnosed and reported in 2002 per 100,000 population.

400.9

1,130.0

#### **Notes**

Rate

\* Chlamydia, gonorrhea, and syphilis combined.

393.0

\*\* North End data are included with data for the Back Bay.

421.2

382.7

### **Data Sources**

Massachusetts Department of Public Health, STD Division, and Boston Public Health Commission, Communicable Disease Control Division

861.5

#### **BOSTON NEIGHBORHOOD DATA**

## **OVERALL MORTALITY**

### Overall Mortality by Neighborhood, Boston, 2000-2002

	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	1,179	404	359	954	255	941	672	359	1,513	301	1,282	1,266	1,119	1,038	692	997	13,488
Rate	733.4	536.9	950.5	865.2	744.5	891.6	979.4	905.1	930.4	675.3	923.9	1,022.7	1,195.3	894.0	726.4	798.8	886.0

### **Definitions**

Number: A count of deaths among Boston residents from the specified neighborhoods.

Rate: The average number of deaths per year per 100,000 neighborhood residents.

## Example

Among Allston/Brighton residents, there were 1,179 deaths for the period 2000-2002. The average rate was 733.4 deaths per 100,000 Allston/Brighton residents.

#### Note

The rates shown are age-adjusted.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

## **BOSTON NEIGHBORHOOD DATA**

#### SUBSTANCE ABUSE

#### Introduction

Treatment for substance abuse (alcohol and drug addiction) may include detoxification services, counseling, and other medical treatments. Treatment can be provided in a number of public and private settings. Substance abuse treatment in public facilities involves receiving services in facilities designated specifically for that purpose.

		Puk	olicly-Fu	ınded Sub	stance	Abuse 1	Treatmen	t Admis	sions b	y Neigl	hborho	od, Bos	ton, FY2	2002			
	A/B	ВВ	СН	ЕВ	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	643	564	562	1,119	418	547	1,899	893	2,204	234	427	3,073	1,522	4,473	2,839	221	21,638
Rate	9.7	16.1	37.0	29.1	8.8	19.3	52.3	32.1	37.6	20.8	13.1	88.6	50.7	59.4	104.0	9.2	36.7

#### **Definitions**

Number: A count of admissions by Boston residents for substance abuse treatment (alcohol and drugs) in publicly funded facilities.

Rate: The number of admissions per year for substance abuse, per 1,000 neighborhood residents.

## **Example**

Among Allston/Brighton residents, there were 643 substance abuse treatment admissions. The rate was 9.7 admissions per 1,000 Allston/Brighton residents.

#### **Note**

These rates do not indicate the number of people with substance abuse problems, but the number of admissions for substance abuse treatment in publicly funded facilities. They may include people who were admitted more than once.

#### **Data Source**

Massachusetts Department of Public Health, Bureau of Substance Abuse Services

#### **BOSTON NEIGHBORHOOD DATA**

### SUBSTANCE ABUSE

#### Introduction

Substance abuse (alcohol and drugs) is a major cause of premature death among many segments of the population, especially males ages 25-44. It is a leading cause of death at the national, state, and local levels.

		Sub	ostanc	e Abus	e Mort	ality b	y Neigh	nborho	od, Bo	ston, 2	000-200	02					
	A/B	ВВ	СН	ЕВ	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	22	11	16	34	11	20	11	7	50	9	10	30	45	24	34	13	347
Average Annual Rate	14.6	10.9	30.3	32.5	28.6	19.5	10.8	12.2	22.3	27.8	9.5	21.8	47.3	18.6	32.1	15.2	21.1

#### **Definitions**

Number: A count of substance abuse (alcohol and drug) deaths among Boston residents from the specified neighborhoods. Average Annual Rate: The average number of deaths per year for substance abuse per 100,000 neighborhood residents.

### Example

Among Allston/Brighton residents, there were 22 substance abuse deaths for the period 2000-2002. The average rate was 14.6 deaths per 100,000 Allston/Brighton residents.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

#### **BOSTON NEIGHBORHOOD DATA**

### **HEART DISEASE**

#### Introduction

Overweight and obesity have increased tremendously in the past 20 years at the national level. In 2000, 37% of the US adult population was estimated to be overweight, and an additional 20% was obese, as indicated by body mass index. Unfortunately, the overweight and obesity epidemic is not limited to adults. The percentage of overweight children and teens has more than doubled in the past 20 years. The health consequences of being overweight or obese include diabetes, high blood pressure, heart disease, certain cancers and other health problems.

## Overweight/Obese Adults by Neighborhood, Boston, 1999 and 2001

	A/B	BB	CH	EB	FW	HP	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Percentage of Adults	35%	39%	55%	55%	32%	61%	41%	66%	58%	**	49%	51%	60%	58%	35%	48%	47%

#### **Definition**

Percentage: Of all resident adults in a neighborhood, the percentage who were overweight or obese, on the basis of the ratio of their weight to their height

### Example

Among Allston/Brighton residents, 35% are considered to be overweight or obese.

#### **Notes**

The percentages shown are based on combined survey data for 1999 and 2001 and are weighted.

\*\* North End data have been incorporated with data for the Back Bay.

### **Data Sources**

Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, and Boston Public Health Commission

#### **BOSTON NEIGHBORHOOD DATA**

#### **HEART DISEASE**

#### Introduction

Limited physical activity can contribute to overweight and obesity, arthritis, high blood pressure, heart disease, osteoporosis, diabetes, and certain cancers.

	,	Adults A	t Risk o	of Healt	h Probl	ems Du	ie to La	ck of Ex	ercise l	by Nei	ghborh	ood, Bo	ston, 20	01			
	A/B BB CH EB FW HP JP MAT ND NE ROS ROX SB SD SE WR Boston																
	A/D	DD	СП	LD	LAA	пг	JF	IVIAI	ND	INC	NUS	NUX	36	JU	3E	AAL	DOSION
Percentage	58%	37%	56%	68%	39%	69%	50%	81%	68%	**	64%	72%	45%	63%	55%	63%	57%

#### Definition

Percentage: The percentage of adult neighborhood respondents who reported no physical activity or less than 30 minutes of physical activity at least five times a week

### Example

Among Allston/Brighton adult residents, 58% are at risk of health problems due to lack of exercise.

#### **Notes**

Percentages are weighted. Limited physical activity means having no physical activity or less than 30 or more minutes, five or more times a week.

\*\* North End data have been incorporated with data for the Back Bay.

#### **Data Sources**

Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, and Boston Public Health Commission

#### **BOSTON NEIGHBORHOOD DATA**

### **HEART DISEASE**

#### Introduction

Blood pressure describes the force that blood exerts against the walls of arteries. It rises and falls during the course of the day but when it stays up, it is called high blood pressure or hypertension. High blood pressure is a risk factor for heart disease, stroke, kidney disease, and blindness. The National Institutes of Health estimates that 1 of every 4 adults in the US has high blood pressure. Although many people tend to develop high blood pressure as they get older, those who are overweight or have a family history of high blood pressure are at risk for development it. African Americans are especially at risk.

Adults Ever	Told by	Health	Care P	rovide	r They	/ Have	High B	lood Pr	essure	by N	eighbo	rhood,	Bostor	ı, 1999	and 20	01	
	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
	A D	טט	CII	ב	1 44	III	JF	IAIV	שוו	_	100	NOX	30	30	5	AAIZ	DOSION
Percentage	14%	10%	33%	25%	6%	29%	12%	38%	24%	**	16%	29%	17%	25%	20%	33%	19%

#### Definition

Percentage: The percentage of adult neighborhood respondents who reported ever having been told by a health care provider that they have high blood pressure.

### Example

Among Allston/Brighton adult residents, 14% reported being told by a health care provider that they have high blood pressure.

#### Notes

The percentages are based on combined data for 1999 and 2001 and are weighted.

\*\* North End data have been incorporated with data for the Back Bay.

#### **Data Sources**

Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, and Boston Public Health Commission

#### **BOSTON NEIGHBORHOOD DATA**

#### **HEART DISEASE**

#### Introduction

Heart (cardiovascular) disease is a group of disorders that affect the heart and blood vessels. Major risk factors are high blood pressure and high blood cholesterol. However, age, gender, race and ethnicity, exposure to tobacco smoke, poor nutrition, limited physical activity, overweight/obesity, and diabetes are associated with cardiovascular disease risk. Nationally, cardiovascular disease has been the leading cause of death for the US population for almost every year since 1900<sup>1</sup>.

Heart Disease Mortality by Neighborhood, Bos	ton, 2000-2002
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	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	300	87	88	223	71	238	170	72	344	82	309	259	279	214	137	231	3132
Average	183.0	114.8	243.8	201.2	206.2	224.1	253.1	196.8	232.2	178.9	214.3	212.9	297.2	187.3	145.2	173.5	206.9

#### **Definitions**

Number: A count of cardiovascular disease deaths among Boston residents from the specified neighborhoods.

Average Annual Rate: The average number of cardiovascular disease deaths per year per 100,000 neighborhood residents.

## **Example**

Among Allston/Brighton residents, there were 300 cardiovascular disease deaths for the period 2000-2002. The average rate was 183.0 deaths per 100,000 Allston/Brighton residents.

#### Note

The rates shown are age-adjusted.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

<sup>&</sup>lt;sup>1</sup> American Heart Association. Heart Disease and Stroke Statistics – 2004 Update. Available at http://www.americanheart.org/downloadable/heart/1079736729696HDSStats2004UpdateREV3-19-04.pdf. Accessed June 16, 2004.

#### **BOSTON NEIGHBORHOOD DATA**

### CANCER

## Adults Smokers by Neighborhood, Boston, 1999 and 2001

	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Percentage	18%	22%	18%	18%	25%	13%	15%	31%	22%	**	16%	12%	20%	25%	23%	6%	19%

### Definition

Percentage: The percentage of adult respondents in each neighborhood who reported being a current smoker.

### Example

Among Allston/Brighton adult residents, 18% are current smokers.

#### **Notes**

The percentages are based on combined data for 1999 and 2001 and are weighted.

\*\*North End data have been incorporated with data for the Back Bay.

### **Data Sources**

Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, and Boston Public Health Commission

#### **BOSTON NEIGHBORHOOD DATA**

### **CANCER**

#### Introduction

Cancer is a chronic disease involving uncontrollable growth and spread of abnormal cells. Lung cancer is the leading cause of cancer death in the US. Among the many risk factors for cancer are tobacco use, exposure to chemicals, radiation, infectious organisms and sunlight, heredity, hormones, immune conditions, metabolic mutations, and age. Many cancer deaths are preventable. According to the American Cancer Society, about a third of the cancer deaths expected for 2003 will be related to nutrition, physical inactivity, overweight or obese, and other lifestyle factors.

## Cancer Mortality by Neighborhood, Boston, 2000-2002

	A/B	ВВ	СН	EB	FW	НР	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	266	135	94	244	62	238	132	92	378	75	233	269	280	248	184	242	3211
Rate	177.6	177.2	241.0	230.8	184.5	227.3	198.1	216.6	229.2	181.7	195.1	222.4	302.6	218.1	196.3	215.2	218.2

#### **Definitions**

Number: A count of cancer deaths among Boston residents from the specified neighborhoods.

Rate: The average number of cancer deaths per year per 100,000 neighborhood residents.

## **Example**

Among Allston/Brighton residents, there were 266 cancer deaths for the period 2000-2002. The average rate was 177.6 deaths per 100,000 Allston/Brighton residents.

#### Note

The rates shown are age-adjusted.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

#### **BOSTON NEIGHBORHOOD DATA**

### **DIABETES**

#### Introduction

Diabetes is a chronic disease in which the body does not produce adequate insulin or does not properly use insulin. Insulin is a hormone in the body necessary for converting sugar, starches and other food. There are two major types of diabetes: Type 1 and Type 2. Type 1 diabetes occurs when the body does not produce insulin. Type 2 diabetes, the more common of the two types, occurs when the body does not properly use insulin. In 2002, diabetes was the sixth leading cause of death in the US.

## Diabetes Mortality by Neighborhood, Boston, 2000-2002

	A/B	ВВ	СН	EB	FW	HP	JP	MAT	ND	NE	ROS	ROX	SB	SD	SE	WR	Boston
Number	27	N<5	6	19	12	23	16	17	41	6	29	46	22	35	18	15	345
Rate	18.1	N<5	14.8	17.7	37.6	22.2	23.7	39.8	27.8	14.3	23.3	38.4	23.8	30.1	19.2	11.8	23.2

#### **Definitions**

Number: A count of diabetes deaths among Boston residents from the specified neighborhoods.

Average Annual Rate: The average number of diabetes deaths per year per 100,000 neighborhood residents.

### Example

Among Allston/Brighton residents, there were 27 diabetes deaths for the period 2000-2002. The average rate was 18.1 deaths per 100,000 Allston/Brighton residents.

#### Note

The rates shown are age-adjusted.

#### **Data Source**

Boston resident deaths, Massachusetts Department of Public Health

## **TECHNICAL NOTES**

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#### Rates

Four types of rates are presented in this report: crude rates, age-specific rates (ASR), age-adjusted rates (AARs), and incidence rates. A rate is a measure of some event, disease, or condition in relation to a unit of population, per year.

Crude rates are used to present data pertaining to the entire population, such as all of Boston, or to present data pertaining to an entire group within a population, such as all males or females. A crude rate is calculated by dividing the number of events for the entire population by the total population. It is usually calculated on the basis of every 100,000 people or, in the case of birth rates, every 1,000 females.

Age-specific rates take into account the size and age distribution of the population. They enable the reader to compare different groups without being concerned that differences in health status are due to differences in the size of the groups or in the distribution of ages. An ASR is calculated by dividing the number of events among people in an age group by the number of people in that age group. ASRs for deaths and for communicable diseases are usually calculated on the basis of every 100,000 people.

Unless otherwise indicated, the age-specific rates provided in Health of Boston are average annual rates. Average annual rates are calculated by dividing the age-specific rates by the number of years in the time period the data represent.

Age-adjusted rates are used to present data for comparison among several populations, such as Boston neighborhoods, in which distribution of age can differ considerably. The calculation for AARs takes into account the differences in age distribution and adjusts for them.

The AAR is calculated by applying the age-specific rate in a population for a specific event such as death to a standard population (typically, the 2000 US standard population). AARs are used for Boston mortality data for overall Boston, for overall Boston mortality data by sex, by race/ethnicity, by neighborhood, and for hospitalization data.

Incidence rates are used to present data relating to reported new cases of disease during a specified time period and are usually calculated on the basis of every 100,000 people. Incidence rates may or may not be age-specific.

## Statistical Significance

An array of statistical tools is available to determine whether findings, typically differences observed between groups or within a group over a period of time, are large enough that they are not likely to have been due to chance. Essentially, statistical significance testing provides an assessment of how reasonable it would be to conclude that an observed difference is real. It is not capable of overcoming other issues such as noncomparable samples or too few cases in a sample, but is a valuable guide to the interpretation of rates, proportions, and similar measures.

Statistical significance is only one measure of significance. There may be findings that have other important relevance clinically or for public health programs, regardless of statistical significance. An absence of statistical significance should not be used to imply an absence of other significance. For most purposes, 95% confidence intervals are used to determine the statistical significance of findings.

### Confidence Intervals

A confidence interval is a range of values used to describe uncertainty around a data point such as an age-adjusted mortality rate. Confidence intervals are a measure of variability in the data.

A confidence interval is calculated based on a stated probability (usually 95%) that the confidence interval includes the "real" value that would be identified if samples did not vary due to chance. In an example using an age-adjusted mortality rate, a 95% confidence interval would be described as having a 95% probability of including the "real" age-adjusted mortality rate. Generally, if confidence intervals overlap, the rates would be considered not significantly different. If the confidence intervals do not overlap, then the rates would be considered significantly different and the finding would be called statistically significant.

Confidence intervals provide a way of reporting the reliability of, for example, a rate or proportion. They also account for the difference between a sample from a population and the population itself.

#### C. Population

Health status reports often use population statistics for analyzing health data. These population statistics may be drawn from two sources. The first is the census of the population taken every ten years by the federal government, a literal count of all people living in the United States. The second is estimates of the population made by the US Census Bureau or some other source in the intervening years.

The census provides the best available actual count of the population. It also presents data to the level of small areas called census tracts, each of which has only a few thousand residents. Census tracts can be combined to produce neighborhood-level analyses.

Population projections or estimates are developed by the Census Bureau and other institutions using sophisticated statistical methods. The results are designed to take into account in- and out-migration and other changes occurring in the population between census years. And yet estimates of population changes between census years have some drawbacks. They do not typically account for changes in the racial composition of a community, and they do not generally permit neighborhood-level analyses. Perhaps most importantly, even small errors in the accuracy of projections for neighborhoods or other population subgroups can result in large distortions in the resulting statistical estimates.

To provide data on people of Latino ethnicity, who may be of any race, this report uses the 2000 US census for Boston census tracts, produced by the Bureau of the Census, and MISER and Massachusetts Department of Public Health population estimates, for denominators for rate calculations. This avoids the double-counting which would result if Latinos were included in the White, Black, and Asian racial categories as well as in the Latino categories. However, in hospitalization data, Latinos are reported in the White, Black, Latino, or Asian category, depending on the individual hospital's practices. This produces unreliability in data reporting, and readers must interpret hospitalization data by race/ethnicity with considerable caution.

Population estimates were used in calculating crude, age-adjusted, and age-specific rates in The Health of Boston for years between the 1990 and 2000 US censuses. Population estimates from the Massachusetts Institute for Social and Economic Research (MISER) and the Massachusetts Department of Public Health were used for intercensal years.

#### Racial and Ethnic Designations

The classification of race/ethnicity depends upon the data source. In this report, all racial or ethnic designations except those used on the death certificate are self-reported. Several cautions should also be kept in mind when using data reported by race/ethnicity.

Race and ethnicity are social constructions, not biological facts. There is typically more genetic variation between members of the same race than between members of different races. In addition, the meanings of these designations are highly subject to historical, cultural, and political forces. Not only do they change over time, but there is also a very subjective element that influences who is considered a member of one group or another. And the concept of race can be notably vague: the term "Black," for example, includes people describing themselves as African American, African, or Caribbean, groups with distinct histories and differing health risks.

Nevertheless, racial designations are useful in that they are nearly universally used by people in the United States to describe themselves, and they permit us to identify and address the often huge disparities in health that exist across race/ethnicity groups. Race is often a proxy for such factors as socioeconomic status, inadequate access to health care, and racial discrimination.

Boston-specific data in this report are presented for each racial and ethnic subgroup when numbers are large enough to allow calculation of percentages or reliable rates. Few sources have data in large enough numbers to allow presentation of data about smaller groups such as the many ethnicities included in the category "Asian/Pacific Islander."

Since Latinos can be of any race, the federal sources often report data for Blacks and Whites, including Latinos in those categories. However, in The Health of Boston, Latino ethnicity is presented a separate category. Exceptions to this are the hospitalization and asthma hospitalization data by race/ethnicity, for which race/ethnicity reporting practices vary by hospital. The US Census Bureau does not recommend comparing the population by race in 1990 with the population by race in 2000.

## Age-Adjusted Mortality

Age-Adjusted Rates (AARs) are used to present data for comparison among several populations, such as Boston neighborhoods, in which distribution of age can differ considerably. The calculation for AARs takes into account the differences in age distribution and adjusts for them. The AAR is calculated by applying the age-specific rate in a population (for a specific event such as death) to a standard population. The year 2000 standard US population is used in this report.

The International Classification of Disease (ICD) is a coding system developed by the World Health Organization (WHO) and 10 international centers. It standardizes medical terms used on death certificates and groups them for statistical purposes. The International Classification of Disease, Ninth Revision, Clinical Modification (ICD-9-CM) is used for categorizing and classifying morbidity data from inpatient and outpatient records of hospitals. It should not be confused with the International Classification of Disease used for categorizing and classifying mortality data from death certificates, whose revision from ICD-9 to ICD-10 became effective with 1999 mortality data.

Mortality data are coded using ICD-10. The change from ICD-9 to ICD-10 means that causes of death classified according to the ICD-10 are not precisely comparable to causes of death classified according to ICD-9. Mortality charts in this report present data for 1999 and on separately from data for earlier years.

### **Boston Neighborhoods**

Census tracts are so small that there are often not a sufficient number of health-related events—such as deaths—to calculate reliable rates. For The Health of Boston and other reports, census tracts are aggregated into Boston neighborhoods for the presentation of the mortality data. Zip codes are combined into neighborhoods for the presentation of hospitalization data by neighborhood.

Some of Boston's neighborhoods are clearly defined. West Roxbury, for example, is bordered by the West Roxbury Parkway, the Stony Brook Reservation, and Dedham. The boundaries of most neighborhoods, however, are less distinct and often the subject of dispute. The neighborhood definitions used here were defined by the Boston Public Health Commission in consultation with local residents, health care providers, and advocates throughout the city.

## Data Sources

AIDS Reporting System (ARS). Massachusetts Department of Public Health, Bureau of Communicable Disease Control, HIV/AIDS Surveillance Program.

Acute Care Hospital Case Mix files. Massachusetts Division of Health Care Finance and Policy.

Acute Care Hospital Discharges. Massachusetts Health Data Consortium, Inc.

Age of Housing: Boston. Census 2000, US Department of Commerce, Bureau of the Census, American FactFinder.

Behavioral Risk Factor Survey. Behavioral Risk Factor Surveillance System. Boston: Massachusetts Department of Public Health and Boston Public Health Commission.

Boston resident births. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Registry of Vital Records and Statistics.

Boston resident deaths. Massachusetts Department of Public Health, Center for Health Information, Statistics, Research, and Evaluation, Registry of Vital Records and Statistics.

Communicable diseases. Boston Public Health Commission, Communicable Disease Control Division.

Census 2000, US Department of Commerce, Bureau of the Census, American Fact Finder.

Drug arrests. Boston Police Department, Office of Research and Evaluation.

Emergency department visits. Division of Health Care Finance and Policy.

Health insurance coverage. Health Insurance Status of Massachusetts Residents Survey. Boston: Division of Health Care Finance and Policy, Massachusetts Department of Public Health.

Homeless counts. City of Boston Emergency Shelter Commission.

Lead screening. Boston Public Health Commission, Office of Environmental Health, Boston Childhood Lead Poisoning Prevention Program.

Open Space Plan 2002-2006. Boston Parks and Recreation Department. Policy and Resource Development Unit.

Population estimates, Massachusetts Institute for Social and Economic Research, University of Massachusetts, Amherst.

Sexually transmitted diseases. Massachusetts Department of Public Health, STD Division, and the Boston Public Health Commission Communicable Disease Control Division.

Substance abuse treatment. Massachusetts Department of Public Health, Bureau of Substance Abuse Services.

Youth Risk Behavior Survey. Boston School Department, Unified Student Services.

Weapon-related injuries. Massachusetts Department of Public Health, Weapon-Related Injury Surveillance System.

## Glossary

To help the reader compare the data presented for specific health indicators in this report to data from other sources, the definitions provided below include the codes used to classify causes of hospitalization or death. The hospitalization codes are from the Diagnostic Related Grouping (DRG), based on version 8 of the Federal Grouper. The cause-of-death codes are from the International Classification of Diseases, 9<sup>th</sup> Revision, (ICD-9), and International Classification of Diseases: 10<sup>th</sup> Revision (ICD-10), products of the US Department of Health and Human Services.

AAR: See Age-Adjusted Mortality Rate

Acquired Immune Deficiency Syndrome (AIDS): See HIV/AIDS.

Adolescent Births: Births to adolescents 10 to 17 years of age.

African American: All persons self-identified as being born in the US and of African descent. The numbers from the 2000 census used in the Demographics section use a different way of counting races and ethnicity and should not be compared with numbers drawn from earlier censuses.

Age-Adjusted Mortality Rate (AAR): The age-adjusted mortality rate is calculated by applying the age-specific mortality rates in a population to a standard population (typically, and in this report, the 2000 US population). The age-adjusted rate of one area or group can be compared to the age-adjusted rate of another area or group with confidence that differences in the rates of the two areas or groups do not stem from differences in the age structure of their populations. AARs are extensively used in the Healthy People 2010 goals.

Age-Specific Mortality Rate (ASR): The number of deaths per year in a given age group per 100,000 people in that age group.

Age-Specific Birth Rate: The number of live births in a population divided by the total female population for a specific age group and expressed per 1,000 persons.

Alcohol-Related Deaths: Causes of death directly related to alcohol use/abuse, such as liver disease attributed to alcohol consumption, accidental alcohol overdose, etc. This category does not include deaths indirectly due to alcohol use, such as deaths due to injuries occurring while intoxicated or deaths caused by another person who was intoxicated. For pre-1999 data in this report, ICD-9 codes 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, 790.3, E860; for data from 1999 and later years ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15.

Amebiasis: Parasitic infection of the intestine, spread through ingestion of fecally contaminated food or water. Transmission may occur sexually by fecal-oral contact. Symptoms are often mild and can include loose stools, stomach pain, and stomach cramping.

Asian: All persons self-identified as Asian or Pacific Islander (e.g., Chinese, Japanese, Hawaiians, Cambodians, Vietnamese, Asian Indians, Filipinos) who do not identify themselves as Latino. The numbers from the 2000 census used in the Demographics section use a different way of counting races and ethnicity and should not be compared with numbers drawn from earlier censuses.

Asthma and Bronchitis: Asthma is a chronic inflammatory condition defined by sudden periodic attacks of difficulty in breathing accompanied by wheezing caused by a spasm of the bronchial tubes. Bronchitis refers to inflammation of the mucous membrane of the bronchial tubes. DRG 96-98.

Behavioral Risk Factor Surveillance System (BRFSS): A random telephone survey of Massachusetts adults ages 18 years and older. The survey is sponsored by the Centers for Disease Control and Prevention (CDC) and is conducted annually in all 50 states. The BRFSS collects information regarding various health-related issues, such as behavior, attitudes, knowledge, access to health care, and opinions on health policy issues. The responses to the survey provide important information regarding the prevalence of risk factors that are responsible for causing premature death, illness, and disability among Massachusetts residents.

Birth Rate: The number of live births per year, per 1,000 women ages 15-44.

Birthweight: The weight of an infant at the time of delivery. It may be recorded in either grams or pounds/ounces. If recorded in pounds/ounces, it is converted to grams for use in this report based on the following formula: 1 pound = 453.6 grams; 1,000 grams = 2 pounds and 3 ounces.

Black: All persons self-identified as Black (e.g., African Americans, Haitians, West Indians) who do not identify themselves as Latino. The numbers from the 2000 census used in the Demographics section use a different way of counting races and ethnicity and should not be compared with numbers drawn from earlier censuses.

Blood Cholesterol: Cholesterol is a soft, waxy substance found among the lipids (fats) in the blood stream and cells. It is an important steroid because it comprises cell membranes, hormones, and tissues. However, levels of cholesterol in the blood that are too high are a major risk factor for coronary heart disease, which leads to a heart attack.

Blood Lead Levels: The amount of lead detected in the blood during the finger-stick screening or venous-confirmation blood tests. ("Venous" means "in or of the bloodstream or veins.")

Body Mass Index (BMI): Calculated by dividing a person's weight in kilograms by his or her height in meters squared (kg/m²); a measure of the appropriateness of weight in relation to height. This calculation is used to screen and monitor populations in order to detect risks of health or nutritional disorders.

BMI is used differently with children than with adults and is plotted according to age and sex-specific charts. The 1995 BMI cutpoints for adults are as follows:

Overweight BMI of 25.0 to 29.9 Obese BMI of 30.0 or more

The Centers for Disease Control and Prevention states that a BMI of 30 is equivalent to one being approximately 30 pounds overweight.

In 1995 the World Health Organization released new guidelines adopted by Healthy People 2010 categorizing adult males and females as overweight. Standards utilized by Healthy People 2000 classified males and females separately, both of which had higher cutoffs.

Campylobacter: Infectious bacterial disease transmitted by the ingestion of undercooked poultry or pork, or contaminated milk or water. Transmission may also occur through contact with infected pets and farm animals. Illness typically lasts one week, and symptoms include diarrhea, cramping, abdominal pain, and fever within 2 to 5 days after exposure to the organism.

Cancer: A group of diseases characterized by uncontrolled growth and spread of abnormal cells. For pre-1999 data in this report, ICD-9 codes 140-208; for 1999 data and later years, ICD-10 C00-C97.

Breast Cancer (Female): For pre-1999 data in this report, ICD-9 code 174; for data from 1999 and later years, ICD-10 code C50. Colorectal Cancer: For pre-1999 data in this report, ICD codes 153-154; for data from 1999 and later years, ICD-10 codes C18-C21. Lung Cancer: For pre-1999 data in this report, ICD-9 code 162; for data from 1999 and later years, ICD-10 codes C33-C34. Prostate Cancer: For pre-1999 data in this report, ICD-9 code 185; for data from 1999 and later years ICD-10 codes C61.

Cardiovascular Disease (CVD): A group of diseases that affect the heart, including high blood pressure, coronary heart disease, stroke, congestive heart failure, and congenital heart defects. For pre-1999 data in this report, ICD-9 codes 390-398, 402, 404, 410-429, 430-434, 436-438, 440; for data from 1999 and later years, ICD-10 codes 100-109, 111, 113, 120-151, 160-169, 170.

Cellulitis: An infection of skin or connective tissues (an infection in or close to the skin) is usually controlled by body defense mechanisms. DRG 277-279.

Census 2000: The count of the population undertaken by the Census Bureau in 2000. At the time of publication of this report, national, state, and local numbers have been released. The census 2000 should not be confused with the year 2000 standard population, which is a set of population weights used to calculate age-adjusted rates.

Cerebrovascular Disease: A set of diseases of the vascular system (which conveys blood throughout the body) that affect the supply of oxygen to the brain, thereby damaging brain cells. This category includes strokes. For pre-1999 data, ICD-9 codes 430-434, 436-438; for data from 1999 and later years, ICD-10 codes I60-I69. DRG 14 for hospitalization data.

Chlamydia: A sexually transmitted disease caused by any member of the genus Chlamydia.

Chronic Obstructive Pulmonary Disease (COPD): Diseases including bronchitis, asthma, emphysema, and allergies from inhaled organic dust particles that decrease the ability of the lungs to perform their function (oxygenating the blood system). For pre-1999 COPD data in this report, ICD-9 codes 490-494, 496; for 1999 data, ICD-10 codes J40-J47. For hospitalization data, the DRG code is 88.

Colon and Rectum: The two parts of the large intestine. The colon comprises the upper five or six feet of the large intestine, while the rectum comprises the remaining five to six inches. Together, they are the location of colorectal cancers.

Coronary Heart Disease: A disease of the heart caused by narrowing or blockage of the arteries supplying the heart muscle. For pre-1999 data in this report, ICD-9 codes 402, 410-417, 429.2; for data from 1999 and later years, ICD-10 codes I11, I20-I25, I26-I28, I51.6.

Colonoscopy: A visual screening examination, for colorectal cancer, of the full lining of the colon and rectum, parts of the large intestine.

Confidence Interval: The range within which lies the true value of a variable, based on a chosen probability. For example, given the probability 95%, one can be ninety-five percent certain that the true value lies between numbers X and Y. The range between X and Y is the confidence interval.

Death Rate: The number of deaths per year per 100,000 population.

Demographics: The statistical study of characteristics of human populations and of population distributions such as age, sex, and race/ethnicity.

Diabetes: A chronic metabolic disease characterized by inadequate insulin production by the pancreas. ICD-9-CM codes 250.0-250.9; for data from 1999 and later years, ICD-10 codes E10-E14.

Diagnostic Related Grouping (DRG) Codes: Codes used to group causes of hospitalization.

Drug-Related Deaths: Causes of death related to the use of drugs other than alcohol and tobacco, including direct physiological causes as well as some accidental deaths in which drug use/abuse is involved. Does not include deaths indirectly due to drug use, such as death due to injuries occurring while under the influence of drugs or deaths caused by another person under the influence of drugs. For pre-1999 data in this report, ICD-9 codes 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5; for data from 1999 and later years, ICD-10 codes F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, X40-X44, X60-X64, X85, Y10-Y14.

E-Codes: "E-codes" refer to the supplementary classification within ICD-9-CM of the external causes of injury and poisoning, such as environmental events, circumstances, and conditions. This is particularly helpful in planning intervention. E-codes are intended to be used as an addition to the main ICD code, which classifies the injury or poisoning by the biological system affected.

Gastroenteritis, Esophagitis, and Miscellaneous Digestive Disorders: Infection of the mucous membranes of the stomach and intestine.

Giardiasis: A parasitic infection that is transmitted person-to-person through hand-to-mouth contact of infected feces. Transmission may also occur through ingestion of fecal matter in recreational and drinking water. Symptoms include diarrhea, loose or watery stool, stomach cramps, and upset stomach.

Gonorrhea: A contagious catarrhal inflammation of the genital mucous membrane, transmitted chiefly by sexual intercourse and due to Neisseria gonorrhoeae; may involve the lower or upper genital tract, especially the urethra, endocervix, and Fallopian tubes, or spread to the peritoneum and rarely to the heart, joints, or other structures by way of the bloodstream.

Healthy People 2010 Goals and Objectives: Targets established by the US Public Health Service, in conjunction with the Centers for Disease Control and Prevention and the National Center for Health Statistics, to assist communities with health promotion and disease prevention efforts, and to establish health status goals to be met by the year 2010.

Heart Disease: A group of diseases affecting the heart, including valve and conductive disorders as well as hypertensive diseases. For pre-1999 data in this report ICD-9 codes 390-398, 402, 404, 410-429; for data from 1999 and later years, ICD-10 codes 100-109, I11, I13, I20-I51.

Heart Failure and Shock: Heart failure occurs when the heart is unable to pump blood in an efficient manner. Shock results when the heart cannot pump blood adequately to the tissues and vital organs. DRG 127.

Hepatitis: A contagious viral disease that can be transmitted via sexual contact and/or activity. There are many strains of hepatitis, including hepatitis A, hepatitis B, hepatitis non-A non-B, hepatitis B (unknown carrier), hepatitis B (unverified carrier), hepatitis C, hepatitis D, or hepatitis unspecified.

Hepatitis A: Liver disease caused by infection of the hepatitis A virus (HAV). HAV is transmitted person-to-person through the fecal-oral route, most commonly through contaminated food or water. Onset is abrupt, and symptoms include jaundice, fatigue, abdominal pain, nausea, diarrhea, and fever. Infection does not become chronic.

Hepatitis B: Liver disease caused by infection with the hepatitis B virus (HBV). HBV is transmitted person-to-person through contact with blood and other bodily fluids. Symptoms include jaundice, abdominal pain, fatigue, and joint pain. Acute infection resolves over time. Chronic infection occurs in 90% of infants born with HBV, 20-50% of children less than 5 years old, and 1-10% of persons infected as adults.

Hepatitis C: Liver disease caused by infection with the hepatitis C virus (HCV). HCV is transmitted through blood-to-blood contact, most often through injection drug use. 80% of people infected with HCV will not develop any symptoms, which include jaundice, fatigue, dark urine, and abdominal pain. 75-85% of those infected with HCV will develop chronic liver disease.

Hispanic: See Latino.

HIV/AIDS: The Human immunodeficiency virus (HIV) infection, which leads to Acquired Immune Deficiency Syndrome (AIDS) or other HIV infections. For pre-1999 data in this report ICD-9 codes 042-044; for data from 1999 and later years, ICD-10 codes B20-B24.

HIV+ or HIV Infected: Having tested positive for the antibodies to human immunodeficiency virus (HIV), meaning that one is infected with the virus, with or without major related conditions. DRG 700-702, 704-708, 710-714.

Homeless: The federal government defines "homeless" to mean (1) an individual who lacks a fixed, regular, and adequate night-time residence; and (2) an individual who has a primary night-time residency that is (i) a supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill); (ii) an institution that provides a temporary residence for individuals intended to be institutionalized; or (iii) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings. This term does not include any individual imprisoned or otherwise detained under an Act of Congress or a state law.

Homicide: A death intentionally caused by a person other than the deceased. For pre-1999 data in this report, ICD-9 codes E960-E969; for data from 1999 and later years, ICD-10 codes X85-Y09, Y87.1.

Hospitalization: A patient's continuous stay of one night or more in the hospital for observation, care, diagnosis, or treatment before being released by the hospital, or before death.

Human Immunodeficiency Virus (HIV): The virus that is responsible for causing AIDS.

ICD-9 Codes: Codes designed for the classification of morbidity and mortality information for statistical purposes and for the indexing of hospital records by disease and operations for data storage and retrieval. International Classification of Disease Codes, 9<sup>th</sup> Revision, Clinical Modification (ICD-9-CM) is based on the official version of the World Health Organization's 9<sup>th</sup> Revision, International Classification of Diseases (ICD-9). ICD-9 codes were used to classify mortality data from 1979 to 1998. ICD-9 classification has been replaced by ICD-10 classification. ICD-9CM codes are still used to classify mortality data.

ICD-10 Codes: Data from 1999 and later years is classified according to the International Classification of Disease Codes, 10th Revision (ICD-10), released by the World Health Organization in 2000 and adopted by the United States National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention. ICD-10 classification replaces ICD-9 classification. For more information on these codes and their use, see <a href="http://www.cdc.gov/nchs/icd9.htm#ICD-10-CM">http://www.cdc.gov/nchs/icd9.htm#ICD-10-CM</a>.

IMR: See Infant Mortality Rate.

Incidence: The number of reported new cases of a particular disease over a period of time and in relation to the population in which it occurs.

Incident: A term used by Emergency Medical Services (EMS) to refer to an event leading to the dispatch of one or more Boston EMS units.

Infant Mortality Rate (IMR): The number of deaths under one year of age per 1,000 live births.

Injury: Injury deaths include five categories: homicides, suicides, motor vehicle-related injuries, (other) unintentional injuries, and "undetermined" injuries (for which it was not determined on the death certificate whether the injury was intentional). The latter two categories are frequently presented together in this report. The determinations of intent are for purposes of medical record-keeping only. Each chart that includes data on injury deaths specifies exactly which types of injuries are included. For hospitalization-related charts and text in this report, injury is an aggregation of DRGs 280-282, Major Diagnostic Classification (MDC) 21, 22, and 24 which include for, example, surgical procedures performed due to injury, traumatic injury (open wounds, multiple fractures, limb reattachment), poisoning and toxic effects of drugs, and burns.

Latino: Includes people of any race (Asian, Black, White, or Other) self-identified as Hispanic or Latino (such as Puerto Rican, Mexican, Cuban, Spanish, or Dominican).

Lead Screening: The measurement of blood-lead levels in children to identify those who have been exposed to toxic levels of environmental lead.

Low Birthweight (LBW): Birthweight less than 2,500 grams (or 5.5 lbs).

Malignant Tumor: A tumor which has the ability to invade the surrounding tissues and to spread to other tissue and organ sites. Only malignant tumors are classified as cancers.

Mammogram: A radiographic examination of the breast to screen for malignancies.

Median: Median is the middle value in a distribution. The median divides the total frequency into two parts. One half the cases fall below the median and one half fall above the median. This should not be confused with mean, which is the arithmetic average of a set of values.

Metabolic Disorders: A condition that disrupts the biological process of breaking down food into a form useable by the body.

μg/dL: Micrograms per deciliter. A measurement unit for level of lead in a measured quantity of blood: a billionth of a gram in a tenth of a liter.

Moderate Physical Activity: Defined here as physical activity for 30 minutes that does not cause sweating or hard breathing, on five or more of the seven previous days.

Morbidity: Illness, disease, and/or injury. May be presented as a rate in a specific population in a geographical locality within a particular time period.

Mortality: Death, or the relative frequency of death per unit of population in a specific time period; death rate.

N<5: A notation used on charts in The Health of Boston to indicate that in this health indicator there were fewer than five occurrences (for example, births, deaths, new case of a disease) and that a rate could not be calculated.

Neighborhood: One of 16 distinct geographical areas in Boston.

Neisseria Meningiditis: Acute bacterial infection transmitted through direct contact, including respiratory droplets from nose to throat of infected people. Symptoms include sudden onset of fever, intense headache, nausea, vomiting, and stiff neck. Clinical syndromes include meningoencephalitis, myocarditis, disseminated intravascular coagulation, and septic shock.

Newborns/Neonates: Infants from the time of their birth through the first 27 days of age. DRG 602-640 and "Not Classified" Category.

Pap Smear: A screening test to detect cancerous or precancerous conditions of the cervix.

Pertussis: Also known as "whooping cough," acute bacterial disease involving the respiratory tract, transmitted by direct contact with airborne droplets from mucous membranes. Symptoms include repeated coughing and expelling of mucous.

Pneumonia/Influenza: Bacterial or viral infections of the lungs that primarily affect the aged and persons with compromised immune systems. For pre-1999 data in this report ICD-9 codes 480-487; for 1999 data ICD-10 codes J10-J18.

Pregnancy: The condition of carrying a developing embryo or fetus in the uterus. DRG 370-384.

Psychoses: Acute mental disorders characterized by loss of contact with reality and personality disintegration. DRG 430.

Risk Factor: A characteristic or agent whose presence increases the probability of occurrence of a particular disease, injury, cause of death, or birth outcome.

Salmonellosis: Bacterial infection transmitted by ingestion of contaminated food including raw and undercooked eggs, meat, poultry, raw milk, and water. Symptoms include diarrhea, fever, and abdominal cramps.

Sexually Transmitted Disease: Infection spread by transfer of organisms from person to person during sexual contact.

Shigellosis: Acute bacterial disease of the large and small intestine transmitted by direct or indirect fecal-oral contact. Symptoms include diarrhea accompanied by fever, nausea, vomiting, and abdominal pain.

Shock: See Heart Failure and Shock.

Sigmoidoscopy: A screening test for colorectal cancer to examine the rectum and lower colon, parts of the large intestine.

Simple Pneumonia/Pleurisy: Bacterial or viral infection of the lungs and inflammation of the pleura, the membrane that covers both lungs. DRG 89-91.

Socioeconomics: The statistical study of the social and economic characteristics of a population, such as education and poverty levels.

Statistical Significance: A certain group of statistical tests determines whether findings accurately describe the population of interest or whether they can be explained by chance. If these tests identify the findings to be outside of the range of chance, they are considered to have achieved statistical significance.

Standard Population: An estimate of the US population in which the age, race, and sex distributions are known, resulting in a set of population weights that can be used to calculate adjusted mortality rates. In this report, the year 2000 US standard population is used to calculate age-adjusted mortality rates.

Stroke: A cerebrovascular accident. Stroke occurs when a blood vessel in the brain bursts or when the blood supply to part of the brain is blocked, depriving the brain of oxygen. For pre-1999 data in this report, ICD-9 codes 430-434, 436-438; for 1999 data, ICD-10 codes I60-I69.

Substance Use and Abuse: Use or overuse of ingested substances both legal (such as alcohol) and illegal (such as cocaine). For pre-1999 alcohol related data in this report, ICD-9 codes 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, 790.3, E860; for 1999 data, ICD-10 codes F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15. For pre-1999 drug-related data in this report, ICD-9 codes 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5; for 1999 data, ICD-10 codes F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0- F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0- F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, X40-X44, X60-X64, X85, Y10-Y14. Hospitalization substance abuse data include alcohol and/or drug abuse, dependence, and detoxification and rehabilitation therapy (MDC code 20).

Suicide: The intentional and voluntary taking one's own life. ICD-9-CM codes E950.0-E959.9. For data from 1999 and later years, ICD-10 codes X60-X84, Y87.0.

Syphilis: An acute and chronic infectious disease caused by Treponema pallidum and transmitted by direct contact, usually through sexual intercourse. After an incubation period of 12 to 30 days, the first symptom is a chancre, followed by slight fever and other constitutional symptoms.

Tuberculosis (TB): A bacterial infection which primarily affects the lungs. TB is transmitted through airborne droplets from sneezing or coughing or spitting. People who are infected with latent TB are asymptomatic and cannot transmit the bacteria to others. People with TB disease experience symptoms including chronic cough, pain in the chest, coughing up blood or sputum, fatigue, weight loss, and fever.

Unintentional Injury: An accidental injury. ICD-9-CM codes E800.0-E809.9, E830.0-E949.9, E980.0-E989.9. The ICD-9-CM codes used by the Healthy People 2010 are slightly different: E800.0-E949.9. For the data from 1999 and later years, ICD-10 codes V01.0, V01.1, V01.9, V05.0, V05.1, V05.9, V06.0, V06.1, V06.9, V09.1, V09.3, V09.9, V10.0, V10.1-V10.5, V10.9, V11.0-V11.5, V11.9, V15.0-V15.5, V15.9, V16.0-V16.5, V16.9, V17.0-V17.5, V17.9, V18.0-V18.5, V18.9, V19.3, V19.8, V19.9, V80.0-V80.2, V80.7-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-V95, V96.0-V96.2, V96.8-V96.9, V97.0-V97.3, V97.8-V97.9, V98-V99, W00-X59, Y85.0, Y85.9, Y86.

Uterine Procedures: For hospitalization-related charts and text in this report, uterine procedures is an aggregation of DRGs 354-359, codes for surgical procedures involving the uterus, ovaries, and/or fallopian tubes.

Varicella: Also known as chicken pox, a highly contagious viral infection transmitted by direct contact or through airborne droplets from coughing or sneezing. Symptoms include a skin rash of blister-like lesions, usually on the face, scalp, or trunk.

Vigorous Physical Activity: Defined here as physical activity that causes sweating and hard breathing and promotes cardiorespiratory fitness, for at least three days per week for 20 minutes or more per occasion.

Viral Meningitis: Viral infection resulting in inflammation of the tissues that cover the brain and spinal cord. The virus is transmitted through direct contact with respiratory secretions from an infected person. Symptoms include fever, severe headache, stiff neck, drowsiness or con-fusion, and nausea and vomiting. Also called aseptic meningitis.

Weighted Percentage: A value determined by assigning weights to individual measurements. Each value is assigned a nonnegative coefficient (weight).

White: All persons self-identified as White who do not also identify themselves as Latino.

Youth Risk Behavior Surveillance System (YRBSS): A surveillance system developed by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of youth behaviors that influence health. The survey consists of representative samples of ninth- through twelfth-graders in the United States and the District of Columbia.